Sustainable Financing Mechanism Study for Mono Basin Authority

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RebelGroup

THE WORLD BANK CIWA

Acronyms & Definitions (English)

AfDB	African Development Bank
CEB	Communauté Electrique du Bénin
CEMAC	Economic and Monetary Community of Central Africa
CICOS	International Commission for the Congo-Oubangui-Sangha Basin
Constitutive Resolutions	Résolutions Constitutives de l'Autorité du Bassin du Mono
Convention	Convention Portant Statut du Fleuve Mono et Création de l'Autorité du Bassin du Mono
ECOWAS	Economic Community of West African States
FCFA	Franc CFA (1 EUR = 655.957 CFA)
Founding Texts	Textes Organiques de l'Autorité du Bassin du Mono
GEF	Global Environment Facility
GIZ	Gesellschaft für Internationale Zusammenarbeit
IWRM	Integrated Water Resources Management
MBA	Mono Basin Authority
NBA	Niger Basin Authority
OMVG	Organisation pour la Mise en Valeur du Fleuve Gambie
OMVS	Organisation pour la Mise en Valeur du Fleuve Sénégal
PPP	Public-Private Partnership
RBO	River Basin Organization
Roadmap	Feuille de Route pour la Mise en Œuvre Effective de l'Autorité du Bassin du Mono
Statutes	Statuts de l'Autorité du Bassin du Mono
TCI	Taxe Communautaire d'Intégration
UEMOA	West African Economic and Monetary Union
UNEP	United Nations Environment Programme
VBA	Volta Basin Authority
WRCC	ECOWAS Water Resources Coordination Center

Acronyms & Definitions (French)

ABT	Agence de Bassin Transfrontalier
ABM	Autorité du Bassin du Mono
ABN	Autorité du Bassin du Niger
ABV	Autorité du Bassin de la Volta
BAD	Banque Africaine de Développement
CCRE	Centre de Coordination des Ressources en Eau de la CEDEAO
CEDEAO	Communauté Economique des Etats d'Afrique de l'Ouest
CEB	Communauté Electrique du Bénin
CEMAC	Communauté Economique et Monétaire de l'Afrique Centrale
CICOS	Commission Internationale du bassin Congo-Oubangui-Sangha
Convention	Convention Portant Statut du Fleuve Mono et Création de l'Autorité du Bassin du Mono
FCFA	Franc CFA (1 EUR = 655.957 CFA)
FEM	Fonds pour l'Environnement Mondial
Feuille de Route	Feuille de Route pour la Mise en Œuvre Effective de l'Autorité du Bassin du Mono
GIRE	Gestion Intégrée des Ressources en Eau
GIZ	Gesellschaft für Internationale Zusammenarbeit
OMVG	Organisation pour la Mise en Valeur du Fleuve Gambie
OMVS	Organisation pour la Mise en Valeur du Fleuve Senegal
PNUE	Programme des Nations Unies pour l'Environnement
PPP	Partenariat Public-Privé
Résolutions Constitutives	Résolutions Constitutives de l'Autorité du Bassin du Mono
Statuts	Statuts de l'Autorité du Bassin du Mono
TCI	Taxe Communautaire d'Intégration
Textes Organiques	Textes Organiques de l'Autorité du Bassin du Mono
UEMOA	Union Economiques et Monétaires Ouest Africaine

Executive Summary

Established in 2014, the Mono Basin Authority (MBA) is at an incipient yet critical stage of its formation and establishment. The Constitutive Texts of December 2014 define the governing bodies for the MBA including the Council of Ministers, the Technical Committee of Experts, the Forum of Stakeholders, and the Executive Directorate. Although the Council of Ministers has been established and an ad hoc Technical Committee of Experts has been formed, other bodies have yet to be institutionalized and operationalized. Because the MBA has not been fully established and operationalized, decision-makers still have the flexibility to redefine the proposed organizational structure to ensure its long-term success.

To ensure the Authority's sustainability, the MBA has pursued two key initiatives—the development of a Strategic Action Plan and a Funding and Financing Mechanism Study (hereafter referred to as the Study). The purpose of the Study is to identify, analyze, and propose short-, medium-, and long-term financing mechanisms to ensure the MBA's financial and technical sustainability. The Study was undertaken prior to the finalization of the Strategic Action Plan (expected to be complete in early 2017) and therefore has been unable to make specific references to planned investments or activities. Once the Strategic Action Plan becomes available, its priorities and expected timeline will be help define the MBA's exact budgetary needs for the years to come.

The Study comprised a comprehensive benchmarking exercise with river basin organizations (RBOs) worldwide to identify best practices in RBO organizational structures, funding needs, and financing mechanisms. The benchmarking exercise examined five factors in RBOs globally: (1) institutional structure; (2) mandate; (3) number of full-time staff employed; (4) level of operational budget; and (5) financing mechanisms. It examined twenty river basins in Africa that have catchment areas between 10,000 km^2 and 75,000 km^2. Because only four of these river basins have established RBOs, the benchmarking exercise was expanded to include four larger and well-established RBOs: The Volta Basin Authority (VBA), the Niger Basin Authority (NBA), the Organisation pour la Mise en Valeur du Flueve Senegal (OMVS), and the Commission Internationale du Bassins Congo-Oubangui-Sangha (CICOS).

The benchmarking exercise revealed that it is atypical for a small river basin like Mono (24,000 km^2) to be governed by a formalized RBO with a relatively large secretariat (as proposed in the founding documents). The majority of RBOs worldwide have catchment areas of 100,000 km^2 and greater. The MBA is, therefore, the smallest African RBO structured as an authority. The benchmarking exercise also revealed that many RBOs worldwide struggle to meet their operational costs due to heavy institutional structures and/or unstable funding sources. These findings informed the recommendations of the Study, with the objective of ensuring that the MBA avoid the challenges and pitfalls that other RBOs have faced.

The organizational structure proposed in the MBA's Founding Texts was used to analyze the Authority's expected funding needs and create a projected operational budget. The Founding Texts proposed an organizational structure of 23 full-time staff. Using operational costs from similar regional RBOs, a preliminary operational budget was developed based on the organizational structure described in the Founding Texts. The operational budget—which includes salaries, benefits,

office-related expenses, and annual meetings—anticipates long-term annual operating costs of approximately 500,000,000 CFA.

To account for potential challenges in securing financial resources for the proposed organizational structure, the Study proposes two alternative organizational structures. These alternative structures propose to reduce the MBA's long-term staff from 23 individuals (under the Founding Texts Organizational Structure) to approximately 17 individuals (under an Intermediate Organizational Structure) or approximately 12 individuals (under a Light Organizational Structure). Estimates suggest that they would allow the MBA to reduce its projected long-term annual operating costs by 25% and 43%, respectively. A lighter organizational structure would reduce budgetary implications for member states Togo and Benin and could increase the MBA's long-term sustainability. The Study proposes a five-year transition plan, emphasizing that the MBA should hire staff progressively and based on the priorities and timeline proposed in the Strategic Action Plan.

The Study notes that lighter organizational structures would not impede on the MBA's ability to carry out its mandate, to the extent that project management staff can be covered through donor-funded project budgets. Donor funding for the execution of specific projects and activities in the Strategic Action Plan can include funding for staff expected to manage, oversee, and supervise those projects. This arrangement would allow the MBA to undertake its mission while limiting the number of full-time staff in the operating budget.

In addition to reconsidering the MBA's organizational structure, cost saving approaches could be applied to either of the three scenarios to provide more funding flexibility. The Study identified cost saving mechanisms including: establishing working groups to reduce the need for many full-time staff; taking advantage of in-kind contributions from member states; and considering staff secondments as an alternative to full-time positions, especially during the early years. These cost-saving approaches could be applied under either of the three organizational and institutional scenarios if financing sources fall short of expectations.

The Study identified and evaluated the risks and opportunities associated with potential financing mechanisms and their applicability to the MBA. The financing mechanisms examined included: member state contributions (financial or in-kind); a dedicated regional tax; user fee-based financing; polluter-fee based financing; sale of data and services; project management fees for infrastructure projects; management & administration fees; dividends from an investment fund; donor contributions; and private investment/public-private partnerships. The Study also determined how operating costs will be shared between Benin and Togo based on the MBA's Founding Texts (38.9% for Benin versus 61.1% for Togo). Among the evaluated financing mechanisms, those most relevant to the MBA include: direct member state contributions, dedicated tax, user fee-based financing, management & administration fees, and donor contributions (for specific activities and/or investments).

Based on the evaluation of the MBA's funding needs and the identification of potential financing mechanisms, the Study proposes sustainable short-, medium-, and long-term financing strategies. The short-term financing strategies are expected to apply to the first two years of operations; the medium-term financing strategies to a three-year transition period; and the long-term financing strategies beyond year six of operations. The proposed transition phases may, of

course, be extended or shortened depending on both the timeline of the Strategic Action Plan and the political and financial willingness of the MBA's decision-makers.

In the short run (years 1-2 of operations), the MBA is expected to rely on member state contributions to fund the operational budget and donors to fund investments and activities. From the beginning, the MBA's operating budget will most likely need to be entirely covered by monetary contributions from Benin and Togo. Donors would be expected to support a substantial portion of the MBA's budget for investment in physical assets and activities related to the implementation of the Strategic Action Plan. The size of the activities budget remains to be determined as the Strategic Action Plan is still under development.

In the medium term (years 3-5 of operations), the MBA is expected to continue to rely on member state contributions to fund the operational budget, although it may prepare for a transition to user fee-based financing or regional tax financing in the long-run (starting in year 6). In the medium term, the MBA could either continue its short-term funding strategy (relying on member state contributions) or begin to transition to user fee-based or regional tax financing mechanisms. In the long run (year 6 onwards), the MBA could potentially fund its entire operational budget from user fees or regional tax revenues. Once a user free-based mechanism has demonstrated its effectiveness over a sustained period, the MBA could also complement user fees with polluter fees. This assumes that the MBA would decide to pursue these financing strategies and effectively prepare, implement, and operationalize them. Should the MBA require further time to implement and operationalize these financing strategies, or decide not to pursue them, member states would need to continue to finance the operational budget. Under the long-term financing strategy, donors would be expected to continue to fund a large proportion of the MBA's investments in physical assets and activities budget.

Order-of-magnitude estimates suggest that there is likely sufficient economic activity in the Mono River basin to support user fee-based financing. In pursuing a user fee-based financing approach, the Study recommends that the MBA focus initially on large-scale water users such as the CEB (hydropower) and mining/industrial companies. In the long-term, the MBA could decide to expand its user base to other large-scale water users (drinking water, irrigation) or smaller-scale users. The Study presents order-of-magnitude calculations for two scenarios: (1) the CEB funds the MBA's entire operating budget; and (2) the CEB funds 50% of the MBA's operating budget, with the remaining 50% funded by other large industrial water users. If the CEB would be required to fund the MBA's entire operating budget (about 500 million CFA under Scenario 1, year 6 onwards), the cost of electricity would increase by about 3 CFA/kWh based on the annual production of the 65.6 MW Nangbeto Dam. Once the 147 MW Adjarala Dam begins operations, the cost of electricity would increase by less than 1 CFA/kWh. Assuming that the CEB would contribute only 50% of the MBA's operating budget, the impact on the cost of electricity would be reduced to less than 0.50 CFA/kWh after the completion of the Adjarala Dam. Under the second scenario, assuming 10 large mining/industrial sites exist in the Mono River basin, each would contribute on average 25 million CFA for a total of 250 million CFA (remaining 50% of the MBA's operating budget). The actual contribution of each mining/industrial site will depend on its water usage and/or environmental footprint.

As an alternative to user fee-based financing, regional tax financing such as a community levy could be a stable and effective financing approach but would need to be part of a wider regional

strategy. More specifically, the MBA could pursue regional tax financing (such as an import levy on goods coming into the ECOWAS region) as part of a wider regional strategy to support integrated water resources management across multiple RBOs. A regional strategy could potentially be executed in close collaboration with ECOWAS' Water Resources Coordination Center. Establishing and operationalizing a regional tax is an ambitious political project that would not only affect other RBOs but also other regional institutions. As such, it would need to be part of or accompanied by additional efforts towards regional integration.

The Study concludes that a user fee-based financing mechanism is the most promising long-term financing strategy for the MBA, and should initially be targeted to large-scale water users such as the CEB and mining and other industries. In the long-term, the MBA could target a broader user base, including other large-scale water users (drinking water, irrigation, etc.) or smaller-scale users. A user fee-based strategy will 1) likely take less time to implement than negotiating a regional tax and 2) directly links the benefits of water use with economic activity (a key principle underpinning IWRM). Furthermore, stakeholder consultations suggest that there is broad support for a user fee-based financing mechanism in both countries. A user fee-based financing strategy can only be successful, however, if the MBA can clearly demonstrate its value to the various user groups—particularly those expected to contribute financially to the MBA's operating costs. In combination with a lighter organizational structure, a user fee-based financing strategy as outlined in the Study should allow the MBA to ensure its long-term sustainability.

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1 Introduction

West Africa is widely recognized as one of the world's regions most in need of innovative solutions for tackling water and climate change-related challenges. Limited water resources have been subject to pressures including population growth, climate change, and land use changes. The challenges related to the sustainable use of resources and the lack of institutional infrastructure to address these challenges have acted as obstacles to socio-economic development.

The Mono Basin Authority (MBA) was established as part of a wider regional effort to establish cross-boundary institutional structures to address these wide-ranging social and environmental challenges. The findings provided as part of this Study aim to provide the MBA with a solid foundation on which to base crucial operational decisions as it sets its course of action over the next several years. Section 1 provides context for the establishment of the MBA and elaborates on the purpose of the Study.

1.1 Context of the Study

The Study was conceived as part of a regional initiative to improve coordination on integrated water resources management (IWRM) in West Africa through the establishment of cross-border institutional structures, including within the Mono River Basin.

Textbox 1: Definition of Integrated Water Resources Management

Integrated Water Resources Management

According to the Global Water Partnership: "IWRM is a process that promotes the coordinated development and management of water, land and related resources in order to maximize the resultant economic and social welfare in an equitable manner without compromising the sustainability of vital ecosystems. Integrated management has to be applied through a complete rethinking of water management institutions – putting people at the center."

1.1.1 Integrated Water Resources Management in West Africa

During the past decades, West African governments have made efforts to improve transboundary cooperation on IRWM through the creation of river basin organizations (RBOs).

Many West African countries have had national action plans for IWRM for a number of years. Both Togo and Benin, for example, adopted national water codes in 2010 which are based on the principle of IWRM.[1] Prior to the establishment of the MBA in 2014, however, the governments of Togo and Benin lacked a cross-border governance framework for managing water resources in the Mono Basin.

[1] « Loi No 2010 - 004 du 14 juin 2010 Portant Code de l'Eau, » Government of Togo, June 2010, accessible at: http://droit-afrique.com/upload/doc/togo/Togo-Code-2010-de-l-eau.pdf or http://www.pseau.org/outils/ouvrages/Code_de_l_eau_Togo_2010.pdf and « Loi n° 2010-44 portant gestion de l'eau en République du Bénin, » Government of Benin, October 2010, accessible at : http://www.pseau.org/outils/ouvrages/dgeau_loi_n_2010_44_portant_gestion_de_l_eau_2010.pdf

A regional and integrated approach to IWRM in West Africa has been led by the Economic Community of West African States (ECOWAS). After adopting the Ouagadougou Declaration in 1998, countries endorsed a Regional Action Plan for IWRM in West Africa in 2000. The Regional Action Plan laid the foundation for the establishment of the Permanent Framework for Coordination and Monitoring of IWRM in West Africa in 2001. One of the priorities of both the Ouagadougou Declaration and the Regional Action Plan for IWRM in West Africa was to create or reinforce cooperation frameworks between countries for the management of transboundary IWRM.

The initiatives resulted in three new RBOs:[2]

1. **Comoé-Bia-Tano** between Burkina, Côte d'Ivoire, Ghana, and Mali;
2. **Cavaly-Cestos-Sassandra** between Cote d'Ivoire, Guinea, and Liberia; and
3. **Mono** between Benin and Togo.

Textbox 2: The Importance of Institutional Frameworks for IWRM

Harmonizing Institutional Frameworks for IWRM within National Policy

Establishing and implementing policies, laws, and institutions at a national level is critical to effectively managing water resources. However, such policies and institutions are significantly enhanced in their effectiveness when they are implemented at a transboundary or basin-wide scale. 'Whole basin' approaches provide the opportunity to consider the system-wide implications of environmental and social challenges—regardless of geographic location or country—and to address these in a more dynamic and integrated and manner.[3]

A critical element of IWRM is, therefore, harmonizing national policies and laws; establishing coordinated procedures for good governance; and creating effective institutional and regulatory arrangements that facilitate equitable and sustainable decisions. The Global Water Partnership recognizes several institutional and statutory pillars critical to IWRM:

- Establishing an **enabling environment** of suitable policies, strategies, and legislation for sustainable water resources development and management;
- Creating the required **institutional framework** to operationalize the policies, strategies and legislation; and
- Developing the **management instruments** that these institutions require in order to function, including capacity building.[4]

[2] In a recent publication, Susanne Schmeier, Andrea Gerlak, and Sabine Blumstein defined international RBOs as: "institutionalized forms of cooperation that are based on binding international agreements covering the geographically defined area of international river or lake basins characterized by principles, norms, rules and governance mechanisms."
[3] "A Handbook for Integrated Water Resources Management in Basins," Global Water Partnership, 2009, accessible at: http://www.unwater.org/downloads/GWP-INBOHandbookForIWRMinBasins.pdf
[4] Global Water Partnership Website, accessible at: http://www.gwp.org/en/The-Challenge/What-is-IWRM/IWRM-pillars/

1.1.2 The Importance of IWRM in the Mono River Basin

The Mono River Basin faces various environmental, social, infrastructural, and industrial challenges which require transboundary collaboration.

For decades, numerous initiatives have been pursued on or near the Mono River—including the construction of dams, agricultural activities, and mining activities. Although many of these have provided economic benefits, they have also prompted concerns related to forced displacements, ecological modifications, and pollution, as well as conflicts resulting from lack of coordination between stakeholders.

Textbox 3: Hydropower on the Mono River Basin

Nangbeto and Adjarala Hydroelectric Dams

The two hydroelectric dams—Nangbeto Dam and Adjarala Dam (under development)—are two examples of infrastructure projects that would significantly benefit from a transboundary approach to IWRM.

- **Nangbeto Dam:** The 65.6 MW Nangbeto Dam, constructed between 1984 and 1987, aimed to supply hydroelectric power to Togo and Benin and produce a water reserve for fisheries and irrigation. The project, which was financed by the World Bank and African Development Bank (AfDB), has been managed by the Communauté Electrique du Bénin (CEB), an interstate agency which aims to promote hydropower in the Mono Basin for Togo and Benin. The Nangbeto Dam has been criticized for causing erosion and flooding in a number of local communities.
- **Adjarala Dam:** The governments of Togo and Benin plan to develop a second hydropower in order to increase energy self-sufficiency. The 147 MW hydropower dam, currently under development, is controversial as it requires moving a large number of people to new areas.

1.1.3 The Creation of the MBA

The Togo and Benin governments established the MBA in 2014 with a mandate to, *inter alia*, harmonize national policies; develop integrated action plans; and undertake investment activities on the Mono River Basin.

In July 2014, a meeting of the Council of Ministers in Cotonou adopted draft Constitutive Resolutions for the establishment of the MBA. In December 2014, the governments of Togo and Benin signed the draft Convention on the status of the Mono River, creating the MBA. It was decided that the headquarters of the organization would be located in Benin. The objectives of the MBA are outlined in the textbox below.

Textbox 4: Objectives of the MBA

Constitutive Resolutions: Objectives of the MBA

- ✓ Organize and strengthen cooperation between the riparian countries as well as between these countries and all development partners interested and concerned with sustainable water resources management in the Mono Basin;
- ✓ Harmonize national water resources management policies through the adoption and implementation of an integrated approach for management of the basin's water resources;
- ✓ Mobilize human, technical and financial resources for the implementation of studies, research and works for the use of water resources for economic, social and environmental development of the Mono Basin;
- ✓ Coordinate studies, research and work undertaken in the basin, for the development of water resources, particularly those related to the provision of drinking water and sanitation services to the population, hydroelectric production, irrigation, livestock, fisheries, navigation and the preservation of related ecosystems;
- ✓ Create and/or strengthen the tools and systems for the collection, the processing, the storage and dissemination of data and information needed for scientific research, development planning, and the management of the basin's natural resources, especially its water resources;
- ✓ Develop and implement institutional capacity and tools of planning, monitoring and evaluation for efficient and sustainable management of water resources in the Mono Basin;
- ✓ Undertake any other action in relation to the sustainable management and development of water resources in the basin in the common interest of member states;
- ✓ Promote cooperation between the MBA and similar organizations at the regional and international levels;
- ✓ Authorize the execution of works and projects, planned by member states, that may have significant impact on the basin's water resources;
- ✓ Implement projects and joint works or supervise projects and works of common interest;
- ✓ Strengthen the efforts of riparian countries aimed at managing risks and disasters that may occur in the basin.

Source: Terms of Reference for the Study

1.2 Objectives of the Study

The Study on sustainable financing solutions is being developed in parallel with the MBA's Strategic Action Plan.

During the constitutive meeting of the MBA, one of the key proposals discussed by the MBA's Council of Ministers—and approved by the Presidents of Benin and Togo—was the development of a Strategic Action Plan. The Council of Ministers also agreed that an initial budget—to be financed mainly by contributions of member states—would allow the MBA to meet its initial operating needs and those related to the Strategic Action Plan.

The Council of Ministers asked the Water Resources Coordination Centre of ECOWAS (ECOWAS-WRCC)—with the help of its technical and financial partners—to undertake a study on sustainable financing mechanisms for the MBA. The Study intends to identify potential funding sources that will allow the MBA to become a sustainable and independent institution. Because the Strategic Action Plan is not yet available, the two studies are being undertaken in parallel.

The Study aims to propose sustainable financing mechanisms for three key phases of the MBA's operations: short-run (initial two years); medium-term (subsequent three years); and long-term (beyond five years).

The first two phases are the core of this Study.

1. **Short-term:** A two-year initial phase focuses on funding the MBA's short-term operational plan and will take into consideration the operating costs of the MBA during this period. This two-year phase is assumed to take place between 2017 and 2018.
2. **Medium-term:** The subsequent three-year phase (2019 – 2021) considers the short-term and medium-term operating budget needs.
3. **Long-term:** The Study also discusses the MBA's long-term financing objectives and proposes funding resources and sources which may be available to match these needs.

The Study assumes that the MBA will begin to fund activities related to the Strategic Action Plan in the first year of operations, and that these contributions will grow over time.

2 Approach and Methodology

The approach and methodology used for this Study has been formed on an understanding that the MBA's operations should be based on both regional and international best practices and stakeholder engagement. The methodology used for the Study comprises five pillars, as shown in the graphic below and described in further detail in the table below.

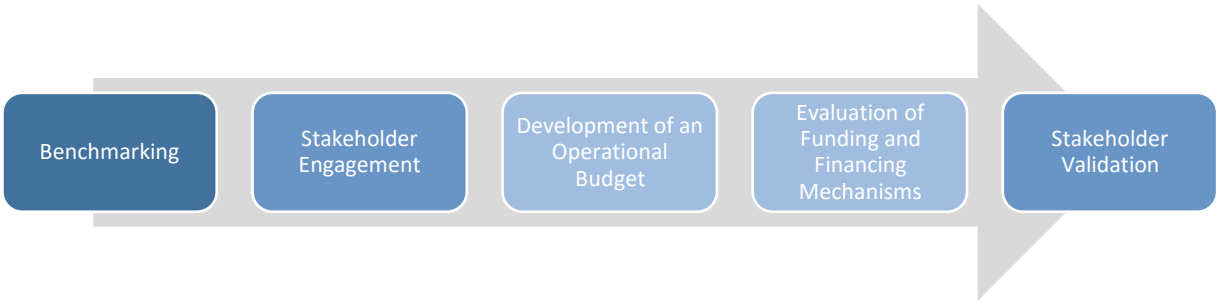


Table 1: Approach and Methodology for the MBA Sustainable Financing Mechanism Study

	Activity	Inputs/Resources	Methodology	Outputs
1	Benchmarking	• RBO literature • Interviews	• Document review • Stakeholder interviews	• Understanding of MBA legal and institutional framework • Inventory of best practices • Recommendations how best practices may apply to MBA
2	Stakeholder Engagement	• RBO literature • Interviews	• Stakeholder interviews	• MBA funding needs (short/medium/long-term)
3	Evaluation of Funding Needs and Development of an Operational Budget	• MBA Founding Texts and other relevant documentation • Strategic action plan 2016-2020 (not yet available) • Pay scales, etc.	• Document analysis • Stakeholder interviews • Benchmarking exercise	• MBA funding needs • Operational budget based on scenarios
4	Identification, Evaluation, and Recommendation of Funding and Financing Mechanisms	• MBA funding needs • RBO literature • Interviews • Comparative analysis of financing mechanisms	• Document analysis • Stakeholder interviews • Comparative analysis of risks & opportunities	• Comparative analysis of financing mechanisms • Recommendation for financing mechanisms based on scenarios • Draft report
5	Stakeholder Validation	• Recommendation for financing mechanisms • Draft report	• Stakeholder outreach • Regional workshop	• Validated recommendation for financing mechanisms • Final report

Source: RebelGroup

2.1 Benchmarking

A benchmarking exercise enabled the Team to examine and analyze regional and international best practices in RBO management.

The Team undertook a comparative analysis of RBOs globally to identify best practices in financing mechanisms. The benchmarking exercise drew heavily on the following documents and databases:

- Gesellschaft für Internationale Zusammenarbeit (GIZ), "Financial Sustainability of International River Basin Organizations", August 2014;
- United Nations Environment Programme (UNEP)/Global Environment Facility (GEF), Transboundary Waters Assessment Programme, River Basin Fact Sheets and Transboundary Freshwater Database; and
- Oregon State University, College of Earth, Ocean, and Atmospheric Sciences, www.transboundarywaters.orst.edu.

The results of the benchmarking are described in Section 4.

2.2 Stakeholder Engagement

Field missions were conducted at an early stage to ensure that the Study would be based on an in-depth understanding of stakeholder priorities and interests.

To ensure that the findings of the Study aligned with stakeholder needs and concerns, the Team undertook field missions to Togo, Benin, and Burkina Faso in June 2016 to collect data and engage with stakeholders. The Team engaged with the MBA's national focal points for Benin and Togo; ECOWAS-WRCC (including the Regional Project Coordinator); technical and financial partners, in particular those active in the sector; sectoral ministries working in sectors including environment, water, and ministries of finance; and relevant companies and national agencies. The complete list of stakeholders with which the Team engaged is presented in Annex I.

In stakeholder meetings, the three key themes that were discussed included: (1) current and future challenges for the MBA; (2) the anticipated role, activities, and investments expected to be undertaken by the MBA in the short, medium, and long-term; and (3) the extent to which specific financing mechanisms were expected to be viable in the short, medium, and long-term.

2.3 Evaluation of Funding Needs & Development of an Operational Budget

To evaluate the MBA's funding needs, the Team examined the MBA's proposed legal, institutional, and operational framework—in particular, its proposed organizational chart.

The Team used existing documentation on the MBA and stakeholder interviews to understand both: (1) the proposed institutional and legal structure for the MBA; and (2) the extent to which it had been operationalized. The Team examined relevant documentation including the Founding Texts of the MBA, its by-laws, and organizational chart. The conclusions from the document review are described in Section 3.

Based on the operational needs identified, the Team developed an operating budget by major types of expenditures.

To evaluate the MBA's funding needs, the Team developed an operational budget that corresponded to the organizational structure presented in the Founding Texts (*Textes Organiques de l'Autorité du Bassin du Mono*). Wherever operational costs were not provided as part of the Founding Texts, they were benchmarked based on the operational budgets of other RBOs.[5]

The budget was developed with two key underlying principles: (1) Ensuring that operational needs could be met under all circumstances and regardless of additional funding sources (allowing implementation activities to depend on additional and potentially less stable funding sources); and (2) Taking into consideration temporal changes, including determining realistic courses of action for the short-term, medium-term, and long-term.

To provide opportunities for a leaner institutional and operational cost structure, the Team developed three operational and institutional scenarios.

The benchmarking exercises and stakeholder engagement revealed that many RBOs face difficulties in meeting their operational costs, which hampers their ability to meet their mission and diminishes political will. The organizational structure proposed by the MBA's Founding Texts (*Textes Organiques)* was considered to be relatively heavy compared to the overall size of the basin (See Section 4 for more detail). To avoid replicating the same operational challenges faced by other RBOs, the Study proposes three institutional scenarios corresponding to three separate operational budgets. These are described in greater detail in Section 7.

2.4 Identification and Evaluation of Financing Mechanisms

The recommendations for the financing plan were based on a detailed assessment of different financing mechanisms and their applicability to the MBA.

First, the Team examined the proposed cost sharing arrangement in the Founding Texts (*Textes Organiques)* and developed preliminary calculations to reflect the proportion of operational costs that would be assumed by each government. Second, the Team examined the potential for, and sustainability of, other financing mechanisms (beyond direct contributions from the member states), including:

- In-kind contributions
- Dedicated tax
- User fee-based system
- Polluter fee-based system
- Sale of data and services
- Project management for infrastructure development
- Management & administration fees

[5] Note: The two principal RBOs used to benchmark operational costs were the Commission Internationale du Bassin Congo-Oubangui-Sangha (CICOS) and the Autorité du Bassin de la Volta (Volta Basin Authority or VBA).

- Dividends from investment fund
- Donor funding
- Private investment and Public-Private Partnerships

The advantages and disadvantages of each of these potential financing mechanisms are described in detail in Section 6. The Team undertook a detailed risk and opportunity assessment for each financing mechanism, which informed the findings in Sections 7 through 9.

2.5 Validation of Findings and Stakeholder Feedback

A regional workshop was organized to validate the findings of the Study and incorporate stakeholder feedback.

In December 2016, the Team organized a regional workshop in Cotonou, Benin to present the initial findings. The purpose of the workshop was to obtain feedback on the findings and recommendations to be incorporated in the final deliverables. A summary of the regional workshop is presented in Annex II.

3 Current Status of the MBA

Developing the MBA's funding needs requires an understanding of the institution's legal and institutional framework, as well as an understanding of the extent to which it has been operationalized. The purpose of this Section is to outline the MBA's founding documents and the extent to which they have been applied in practice.

3.1 Document Review

To evaluate the MBA's legal and institutional framework, the Team reviewed the documents listed in the table below.

Textbox 5: Document Review

Documents Reviewed:

- Convention on the status of the Mono River and the creation of the MBA (*Convention Portant Statut du Fleuve Mono et Création de l'Autorité du Bassin du Mono*);
- Statutes of the MBA (*Statuts de l'Autorité du Bassin du Mono*);
- Founding Texts of the MBA (*Textes Organiques de l'Autorité du Bassin du Mono*);
- Constitutive Resolutions of the MBA (*Résolutions Constitutives de l'Autorité du Bassin du Mono*);
- Draft report on the establishment of a civil society platform for the MBA (*Rapport Provisoire pour l'Etude Relative à la Constitution d'une Plateforme des Organisations de la Societé Civile du Bassin du Mono*); and
- Roadmap for the effective implementation of the MBA (*Feuille de Route pour la Mise en Œuvre Effective de l'Autorité du Bassin du Mono*).

Below we provide a summary of these documents.

3.1.1 Convention on the status of the Mono River and the creation of the MBA

The Convention is one of the MBA's founding documents, describing its establishment, mandate, and mission.

The Convention's objective is to: (1) define the Mono River and its tributaries, sub-tributaries and distributaries as an international river; and (2) create the Mono Basin Authority. It outlines the guiding principles that govern the cooperation between the two member countries (Togo and Benin) and describes the MBA's mission and mandate. Furthermore, the Convention defines the MBA's governing bodies (Council of Ministers, Technical Committee of Experts, Forum of Stakeholders, and the Executive Directorate). The Convention also provides guidance on conflict resolution and practical issues, such as the process for initiating changes to the Convention; the location of the MBA's headquarters (Cotonou); the working language (French); and the ratification process.

Although the Convention reviewed as part of the Study is not dated, it was signed by the Presidents of Benin and Togo on December 30, 2014 and hence is an important foundation for the MBA.

3.1.2 Statutes of the MBA

The MBA's Statutes complement the Convention by detailing the MBA's specific objectives, the operating procedures for the governing bodies, as well as potential funding sources.

The Statutes include a detailed list of specific objectives which focus mainly on cooperation within the context of IWRM. Furthermore, the Statutes define the composition and roles of the MBA's governing bodies. The Statutes also include a section on financial arrangements, including the Council of Ministers' duty to adopt a balanced budget every year.

The Statutes provide a list of potential funding sources, including: (1) member state contributions; (2) other financial resources made available by the member countries; (3) loans, grants, donations, etc.; and (4) all other goods and resources obtained by the MBA. The Statutes clarify that the member countries must pay their contributions by March 31 of each year (without specifying how the level of contribution is determined), and that delays in this payment are subject to the sanctions outlined in the financial regulations, which are included in the Founding Texts (see Section 3.1.3 below). It also notes that all expenses are to be approved by the Council of Ministers.

Following the signature of the Convention, the Statutes were signed on December 31, 2014 in Lomé by the respective ministers responsible for water management for Benin and Togo.

3.1.3 Founding Texts of the MBA

The Founding Texts detail the MBA's expected operational structure, including staffing, compensation, and cost sharing provisions.

Part I of the Founding Texts presents the guiding principles of the MBA, which mirror the language included in the Convention, and outlines the MBA's organizational chart. The proposed organigram contains the following departments and subunits:

- Executive Directorate
    - Comptroller
    - International cooperation and communication unit
- Direction of Operations
    - Irrigation unit
    - Drinking water supply and sanitation unit
    - Fishing unit
    - Hydropower unit
- Direction of Planning and IWRM Implementation
    - Stakeholder and national focus points coordination unit
    - Monitoring and evaluation unit
    - Study and planning unit
- Direction of Administration and Finance
    - Administration, material and human resources unit

    - Finance and accounting unit
- Basin observatory

A visual representation of the MBA's organizational chart as outlined in the Founding Texts is included in Section 7.

Part II of the Founding Texts provides a detailed description of all the positions included in the MBA's organizational chart. In total, the organizational chart anticipates 23 positions, including 7 support staff (assistants, secretaries, and drivers).

Part III describes the MBA's financial regulations. It spells out the potential sources of revenues for the MBA, including contributions from the two member states and technical and financial partners; sales of services and products; returns on investments made by the MBA; grants; and others. The revenues are subdivided into ordinary and extraordinary revenues. Similarly, the MBA's expenditure is subdivided into ordinary expenses (operating expenses, investments in office space, materials and equipment, as well as expenses related to the MBA's usual activities) and extraordinary expenses (large investments, operating expenses, and intervention attributable to prior years). Part III outlines the annual budget preparation and approval process and the procedures for making changes to the budget. Furthermore, it details the procedures for the execution of the budget and the procurement of contracts. Finally, Part III explains the internal and external budget and accounting controls.

Part IV of the Founding Texts lays out the employment terms for the MBA staff, including the internal classification of staff positions; recruitment procedures; staff management and evaluation; compensation; staff's duties, rights and obligations; travel, missions and transfers; termination; and sanctions. Part V contains the MBA's pay scale. The later in combination with the proposed organizational chart provides an important starting point for the evaluation of the MBA's medium-term funding needs, as will be discussed in detail in Section 7.

Part VI details the MBA's cost sharing arrangement. It identifies four criteria that will determine the contribution of the member states. These criteria are:

- The relative size of the member state's catchment area (in km^2), which represents the potential value that the member state could derive from the development of the basin's water resources.
- The number of inhabitants residing in the member state's catchment area, representing the current use of the natural resources of the basin and their level of degradation.
- The annual per capita income, which reflects the member state's economic capacity to fairly contribute to the MBA's operating costs.
- Solidarity between the two member states, reflected by the fact that they will both contribute a minimum share of 30 percent of the MBA's operating costs.

Although the Founding Texts have been reviewed and approved by a working group that consists of technical experts from Benin and Togo, the Founding Texts have not yet been adopted.

3.1.4 Constitutive Resolutions of the MBA

The Constitutive Resolutions provide the basis for ensuring that member states take measures to contribute to the MBA's operational budget.

The Constitutive Resolutions are a set of decisions by the respective ministers responsible for water management for Benin and Togo that include:

- Approving the Convention and the Statutes and committing to signing and ratifying the Convention;
- Adopting the Roadmap (see 3.1.6 below);
- Appointing the interim president of the Council of Ministers;
- Ensuring that necessary measures are taken to establish in both member states budgetary provisions allowing them to contribute to the operational budget of the MBA; and.
- Requesting the host country to provide the MBA with logistical means to allow it to operate for the first five years.

The Constitutive Resolutions are signed and dated July 4, 2014.

3.1.5 Draft report on the establishment of a civil society platform for the MBA

Although the institutional structure for the civil society platform has been determined, it has yet to be established and operationalized.

The draft report on the establishment of a civil society platform for the MBA (dated February 2016) contains a comprehensive inventory of 3,591 civil society organizations (including user groups, NGOs, foundations, companies, research centers, etc.) that are active in the Mono River basin and identifies the need and expectations of such organizations. It also proposes a legal structure for the platform, including its governing bodies, as well as potential funding sources and rules of procedures. The draft report also contains a road map for the creation of the platform (Regional Platform) with a list of activities to be undertaken, as well as the estimated cost.

3.1.6 Roadmap for the effective implementation of the MBA

A number of the stages outlined in the Roadmap—including the development of the Strategic Action Plan, the operationalization of the Forum of Stakeholders, and the promotional activities—have yet to be completed.

The Roadmap outlines six stages—with accompanying activities, responsible parties, deadlines, and observations—that were expected to be achieved between July 2014 and July 2015. These six stages and the extent to which they have been achieved are outlined below.

1. **Legal Agreements:** The legal agreements between Benin and Togo for the establishment of the MBA are signed by the Presidents of Benin and Togo and their respective ministers responsible for water management. – *As confirmed by the signature of the MBA's Convention and Statutes, this result has been achieved.*

2. **Founding Texts:** The Founding Texts of the MBA have been adopted and the governing bodies (including the Executive Directorate) are in place. – *Although the Founding Texts have been reviewed and approved by a working group consisting of technical experts from Benin and Togo, the Founding Texts have not yet been adopted. Furthermore, none of the governing bodies besides the Council of Ministers have been institutionalized or operationalized.*
3. **Convention:** The Convention on the status of the Mono River and the creation of the MBA is ratified by the two member countries. – *As confirmed by the signature of the MBA's Convention by the presidents of Benin and Togo, this result has been achieved.*
4. **Strategic Action Plan:** The MBA Strategic Action Plan is drafted. – *At the time of writing of this report, the drafting of the Strategic Action Plan is under way but not yet completed.*
5. **Forum of Stakeholders:** The Forum of Stakeholders is operational. – *The Forum of Stakeholders is not yet operational.*
6. **Promotional Activities:** Promotional activities for the MBA have been undertaken (including the creation of a website; engagement with the population regarding the creation and operation of the MBA; regional and international encounters; memberships of regional and international organizations working in the water sector; and partnerships). – *As per the Team's understanding, these activities have yet to be undertaken.*

3.2 Conclusions on the MBA's Legal & Institutional Structure

Although the MBA's institutional and legal structure was defined in the various founding documents, it has yet to be fully institutionalized and operationalized.

The various founding documents signed in 2014 define the governing bodies for the MBA, including the Council of Ministers, the Technical Committee of Experts, the Forum of Stakeholders, and the Executive Directorate. Although the Council of Ministers has been established and an ad hoc Technical Committee of Experts has been established to support the creation of the MBA, other bodies have yet to be institutionalized and operationalized.

Although Benin and Togo have appointed National Focal Points to coordinate issues related to the operationalization of the MBA, progress on operationalization remains limited to date.

During its visit to Benin and Togo in June 2016, the Team relied on the respective Focal Points in each country to meet key stakeholders and the members of the ad hoc Technical Committee of Experts, demonstrating their role in mobilizing and connecting sector specialists and others in the context of integrated water resources management. However, it should be noted that some of these experts had not previously participated in meetings of the ad hoc committee and were unaware of the existence of the MBA, which may serve as an indication that the MBA at present remains relatively unknown.

The final Strategic Action Plan is not expected to be available until early 2017.

In the initial timeline, the Team undertaking this Study was expected to have access to the Strategic Action Plan for the MBA, and therefore base its financing mechanisms on confirmed strategic objectives. However, as the drafting of the Strategic Action Plan has been delayed and will not be

completed until early 2017, the Study uses proxy data and benchmarking to estimate the funding and financing needs.

4 Benchmarking Exercise

Within the scope of the Study, the Team undertook a benchmarking exercise to gather information on river basins within Africa of similar size (based on total catchment area) to the MBA.

The MBA has a basin catchment (or drainage) area of approximately 24,000 km². Due to the limited availability of data for river basins in the initial size range (between 10,000 km² and 75,000 km²), the benchmarking exercise was expanded to encompass four additional well-known African RBOs that could provide important insights for the MBA's institutional and operational structure.

4.1 Methodology

The five key questions examined as part of the benchmarking exercise included:

1. **Institutional Structure:** How common is it for rivers basins similar in size to the Mono River basin to establish formalized RBO structures and under what structure do they operate?
2. **Mandate:** What types of mandates do RBOs of similar scope and size typically possess? Do they take on a monitoring (coordination-oriented) role or a project execution (implementation-oriented) mandate?
3. **Staffing:** How many staff members do RBOs of similar scope and size typically employ? How many staff members are typically employed by RBOs that operate in river basins larger than the Mono River Basin?
4. **Operational Budget:** What level of operational budget do RBOs of similar scope and size typically require? What level of operational budgets have been developed for RBOs that operate in river basins that are larger than the Mono River Basin?
5. **Financing Mechanisms:** What financing mechanisms have RBOs of similar scope and size employed? What financing mechanisms have been used by RBOs that operate in river basins that are larger than the Mono River Basin?

4.2 The RBO Sample

Although over twenty river basins in Africa have catchment areas between 10,000 km² and 75,000 km², only four of these river basins are currently governed through RBO structures.

There are over sixty recognized river basins in Africa. Of these, twenty (including the Mono River basin) fall within the catchment area range under review. These twenty river basins were considered as reference points for the MBA, as shown in the table below.

Table 2: Small Scale River Basins in Africa[6] (10,000 km² to 75,000 km² catchment areas)

Name	Treaty	RBO	Founded	Members	Area (km²)	Population	Density (people/km²)	GDP per capita (US$)
Cestos	No	No			13,000	711,500	56	782
				Liberia	10k (82%)			
				Cote d'Ivoire	2k (12%)			
				Guinea	<1k (1%)			
St. John	No	No			16,000	761,500	47	472
				Liberia	13k (83%)			
				Guinea	2.5k (16%)			
				Cote d'Ivoire	0.5k (1%)			
Tano	No	No			17,000	1,750,000	104	1,803
				Ghana	15k (89%)			
				Cote d'Ivoire	2k (11%)			
Little Scaries	No	No			19,000	926,000	50	742
				Sierra Leone	13k (70%)			
				Guinea	6k (30%)			
St. Paul	No	No			20,000	1,026,500	51	499
				Liberia	11k (54%)			
				Guinea	9k (46%)			
Medjerda	No	No			23,000	2,554,000	110	4,600
				Tunisia	15k (66%)			
				Algeria	8k (34%)			
Gash	Yes	No	1951		24,000	1,906,000	81	549
				Eritrea	17k (71%)			
				Sudan	6k (25%)			
				Ethiopia	1k (4%)			
Corubal	Yes	No	1978		24,000	662,000	27	524
				Guinea	18k (72%)			
				Guinea Bissau	7k (28%)			
Mono	Yes	Authority	2014		24,000	2,159,000	90	694
				Togo	21k (89%)			
				Benin	3k (11%)			
Nyanga	No	No			25,000	100,500	4	8,038
				Gabon	20k (80%)			
				Congo-Brazzaville	5k (20%)			
Buzi	No	Commission	2002		28,000	1,318,500	46	639
				Mozambique	24k (87%)			
				Zimbabwe	4k (13%)			
Cavally	No	No			29,000	1,525,000	52	1,123
				Cote d'Ivoire	16k (55%)			
				Liberia	12k (40%)			
				Guinea	1k (5%)			
Maputo	Yes	Commission	1992		30,000	1,335,000	44	4,877
				South Africa	17k (58%)			
				Swaziland	11k (37%)			
				Mozambique	2k (5%)			
Pangani	No	No			40,000	2,901,500	72	703
				Kenya	37k (93%)			
				Tanzania	3k (7%)			

[6] United Nations Environment Programme (UNEP)/Global Environment Facility (GEF) Transboundary Waters Assessment Programme, River Basin Fact Sheets

Ntem	No	No		Cameroon Equatorial Guinea Gabon	44,000 18k (40%) 15k (34%) 11k (26%)	657,000	15	10,103
Incomati	Yes	Commission	1983	South Africa Mozambique Swaziland	47,000 29k (62%) 15k (33%) 3k (5%)	2,105,000	45	4,606
Daoura	No	No		Morocco Algeria	50,000 40k (81%) 10k (19%)	725,000	16	3,165
Cross	No	No		Nigeria Cameroon	52,000 39k (74%) 13k (26%)	10,76,500	205	2,844
Oueme	Yes	No		Benin Nigeria Togo	60,000 49k (82%) 10k (17%) 1k (1%)	8,482,698	142	1,861
Gambia (OMVG)	Yes	Authority	1978	Gambia Guinea Senegal	72,158 7k (10%) 12k (16%) 53k (74%)	1,793,018	25	814

Source: Transboundary Waters Assessment Programme (www.twap-rivers.org)

As previously stated, of the twenty river basins in Africa that fall within the catchment range, only four (excluding the MBA) have established RBOs. All four RBOs are larger than the MBA (in terms of catchment area) with three of these (Buzi, Maputo, Incomati) set up as commissions. The fourth, Organisation pour la Mise en Valeur du Fleuve Gambie (OMVG), is set up as an Authority similar to the MBA.

With over sixty recognized river basins in Africa, just over a third of them are formally designated RBOs. Limited data is available for what could be termed as politically unorganized river basins absent formal treaties or other transboundary agreements.

Due to the lack of available data on RBOs with similar catchment areas as the Mono River Basin, the benchmarking exercise was expanded to include four larger RBOs.

Beyond basic technical data—basin size, population density, etc.—the benchmarking exercise found limited available data for the river basins in Table 2 that were not governed by RBOs. As a result, the benchmarking exercise was expanded to include RBOs with catchment areas over 100,000 km², which have significantly more available data and therefore allow for additional insights into operational and institutional structures.

The four larger RBOs that were included the benchmarking exercise included: (1) the Volta Basin Authority (VBA), (2) the Niger Basin Authority (NBA), (3) the Organisation pour la Mise en Valeur du Flueve Senegal (OMVS), and (4) the Commission Internationale du Bassins Congo-Oubangui-Sangha (CICOS). These four RBOs were chosen because they are well-recognized and have significant public information. Three of these RBOs are regional (in geographical proximity to the MBA), and two overlap with MBA member states (the VBA includes Togo and Benin while the NBA includes Benin).

4.3 Institutional Structure of RBOs

With many hundreds of river basins worldwide, fewer than 100 of these can be classified as RBOs from a governance perspective.

The vast majority of the world's transboundary river basins are bound by treaties. Typically, these treaties are put in place to address a specific concern of the potentially impacted parties. As example, the Nile River is governed by thirteen treaties (although none apply to the entire river basin). Instead, they focus on specific issues such as the management of Lake Victoria or the flows between Egypt and Sudan. These treaties do not address basin-wide issues and only provide a framework for cooperation should broader issues arise.

While research suggests that having any water treaty in place increases cooperation and reduces conflict, the actual content of treaties can vary from a comprehensive framework for management to simple rules for data sharing, stakeholder engagement, or environmental protection. In short, treaties are far from equal. The mere presence of an agreement therefore does not suggest that there are reasonable mechanisms in place to address any basin-wide water issues which may arise.

The MBA is categorized as a RBO due to its transboundary nature—the Mono basin is shared between Togo and Benin—and the existence of a formal convention between its two member countries.

There are typically three institutional set-ups for RBOs—the most prevalent being committees with the other two being commissions and authorities. Committees tend to have the least power where member states have granted limited responsibility to the committee. Committees are found throughout the world and typically focus on wider policy issues rather than specific works and projects, thus being more coordination-oriented. Commissions most often have a medium level of power amongst their member states. Authorities, on the other hand, tend to have significantly more power than a commission and have been known to operate independent of their member states. Authorities tend to be very project driven.

The MBA is categorized as an RBO as it has an internationally binding agreement between the two member states which covers the geographically defined catchment area of the Mono River basin. The MBA, through its Founding Texts, has a set of agreements in place that address membership, organizational structure, and other key factors over the entirety of the basin and not just one or more specific focus areas.

The catchment area of the MBA (24,000 km²) is the smallest among all RBOs in Africa and therefore represents somewhat of an anomaly.

Most RBOs worldwide have catchment areas of 100,000 km² and greater. The MBA is the smallest existing RBO in Africa. The other four basins that have a catchment area of less than 75,000 km² are Buzi (28,490 km²), Maputo (30,228 km²), Incomati (46,630 km²), and OMVG (72,158 km²). These four RBOs have limited operational data available to serve as a reference point for the MBA (perhaps with the exception of OMVG). The Buzi, Maputo, and Incomati RBOs are set up as committees or commissions and have a coordination-oriented focus. They do not have head secretariats and operate under a relatively low profile. The OMVG has been established as an authority and offers more information for comparative purposes which is provided within Table 3.

Table 3: Comparison of Mono River Basin to Other African RBOs

River name	Mono	Buzi	Maputo	Incomati	Gambia	Volta	Senegal	Niger	Congo
RBO name	Mono Basin Authority (MBA)	Joint Water Commission between Mozambique and Zimbabwe	Joint Water Commission between South Africa and Swaziland	Tripartite Permanent Technical Committee	Organisation pour la Mise en Valeur du Fleuve Gambie (OMVG)	Volta Basin Authority (VBA)	Organisation pour la Mise en Valeur du Fleuve Senegal (OMVS)	Niger Basin Authority (NBA)	Commission Internationale du Bassins Congo-Oubangui-Sangha (CICOS)
Catchment area	24,000 km²	28,490 km²	30,228 km²	46,630 km²	72,158 km²	410,992 km²	448,379 km²	2,111,475 km²	3,688,878 km²
Riparian states	Benin Togo	Zimbabwe Mozambique	Mozambique Swaziland South Africa	Mozambique Swaziland South Africa	Gambia Guinea Senegal	Burkina Faso Benin Ghana Mali Togo Cote d'Ivoire	Guinea Mali Mauritania Senegal	Benin Burkina Faso Cameroon Guinea Cote d'Ivoire Mali Niger Nigeria Chad Algeria Mauritania Sierra Leone	Angola Burundi Cameroon CAR DRC Gabon Malawi Congo-Brazzaville Rwanda Sudan Tanzania Uganda Zambia
Member states	Benin Togo	Zimbabwe Mozambique	Swaziland South Africa	Mozambique Swaziland South Africa	Gambia Guinea Senegal	Burkina Faso Benin Ghana Mali Togo	Guinea Mali Mauritania Senegal	Benin Burkina Faso Cameroon Guinea Cote d'Ivoire Mali Niger Nigeria Chad Algeria Mauritania Sierra Leone	Cameroon CAR DRC Congo-Brazzaville Angola Gabon
Establishment	2014	2002	1983	1983	1978	2006	1972	1980	1999
Population	2,159,469	1,318,346	1,334,942	2,104,987	1,793,018	24,282,921	7,409,034	93,617,850	90,605,235
Density (people/km²)	90	46	44	45	25	59	17	44	25
GDP per capita (US$)	$694	$639	$4,877	$4,606	$814	$1,106	$855	$2,125	$723.

Source: United Nations Environment Programme (UNEP)/Global Environment Facility (GEF) Transboundary Waters Assessment Programme, River Basin Fact Sheets and Transboundary Freshwater Database, Oregon State University (College of Earth, Ocean, and Atmospheric Sciences), www.transboundarywaters.orst.edu; Financial Sustainability of International River Basin Organizations/Final Report GIZ, August 2014, Annex Fact Sheets.

4.4 Comparison of MBA to Selected Other African RBOs

The MBA's status as an 'authority' is expected to offer it greater operating influence and autonomy; nevertheless, the MBA remains the smallest African RBO structured as an authority.

The MBA's establishment as an authority (and not a commission or committee) is relevant from a structural and functional perspective. RBOs that are established as authorities typically have greater power over member states and operate more autonomously than commissions or committees. For comparative purposes, the OMVG, VBA and NBA are also established as authorities.

In terms of catchment area, the MBA is the smallest African RBO structured as an authority. By comparison, OMVG is almost triple in size. The Volta Basin Authority is nearly twenty times the catchment area of the MBA while the Niger Basin Authority's catchment area is over 85 times the size of the MBA.

Although the MBA's catchment area is relatively small, its population density is significantly greater than that of other RBOs.

As shown in Table 3, the MBA's catchment population of 2.16 million is about 350,000 greater than the OMVG—despite the OMVG being nearly three times larger in size. This results in an MBA population density of 90 people/km^2—nearly 3.5 times that of the OMVG. The MBA is the most densely populated of the eight RBOs reviewed in Table 3 by a significant margin. Even though both the NBA and CICOS basins have populations of over 90 million people, their overall densities are less than half and a third, respectively, of the MBA. Higher population densities tend to increase the potential for conflicts as competing water usages are concentrated within a relatively small area. As such, population density can be an important factor in determining the structure of the RBO.

A comparison of per capita GDP reveals that MBA's GDP of US$694 is, with the exception of Buzi, the lowest of the eight. Buzi and CICOS are relatively comparable to the MBA with others ranging from nearly 1.5 times the GDP to over seven times the GDP of the MBA.

These basic comparators demonstrate that RBOs do not follow a typical set of standards in their formation. Rather, they are a snapshot of larger geographic and economic conditions. Trends only begin to emerge when examining RBO mandates, organizational structuring, and financing mechanisms.

4.5 Mandate

One of the key distinguishing factors between RBOs is whether they are coordination-oriented (water resource management) or more implementation-oriented (active project development and implementation).

Smaller RBOs such as Buzi, Maputo, and Incomati tend to be coordination-oriented in their functional mandates and operate as commissions. Their primary focus is the sustainable use and conservation of common water resources to their riparian states, as well as the prevention, reduction, and control of pollution. Although these RBOs also offer information, management, and technical advice to support infrastructure development, they typically do not drive such projects.

Larger RBOs such as the VBA, OMVS, NBA, and CICOS typically face pressure from both internal and third party development agencies and stakeholders to become more implementation-oriented. More expansive catchment areas have significantly higher populations which demand increased levels of service and often have greater impacts on the environment.

Based on the research carried out, the Study concludes that the MBA will be setting new ground on small-scale RBO functionality and organizational structure.

The operational structures of smaller RBOs remains relatively undocumented. There is limited reference data available on the few RBOs of similar size to the MBA. Determining the functional mandate of the MBA will be dictated, in large part, by the authority's Strategic Action Plan, which is still being finalized. Because the MBA was established as an authority (and not a commission or committee), it is likely to be somewhat more implementation-oriented in its mandate. This is also reflected in the MBA's Statutes and Founding Texts. Therefore, the MBA should look towards the OMVG, VBA, and NBA's more ambitious development mandates.

Coordination- and implementation-oriented structures, however, are not mutually exclusive. Most RBOs maintain a blended structure that falls somewhere within the spectrum of the two recognizing that mandates evolve over time as the RBO matures. It is expected that the MBA will seek a middle ground between a coordination and an implementation-oriented structure. Hydropower projects may encourage it to have an implementation-oriented focus; however, its relatively small catchment area could result in a more coordination-focused mandate in the long-term. For a more detailed discussion on coordination- versus implementation-oriented mandates as well as the MBA's relation with the Communauté Electrique du Bénin (CEB), please refer to Section 5.3 and Section 6.7.

4.6 Staffing

The organizational structure proposed in the MBA's Founding Texts is similar to that of RBOs with significantly larger river basins, raising questions about the MBA's operational sustainability.

A review of organizational structure and staffing for the smaller RBOs suffers from lack of detailed data. Three of the four RBOs under 75,000 km^2 are set up as commissions with only the OMVG being an authority. None of them are led by an executive directorate. They are instead led by a commission or other leadership body put in place by its member states to provide guidance and direction. Only the larger RBOs tend to have an organizational structure led by an executive directorate. Within the larger RBOs one will also find a council of ministers or heads of state, together with other ministers and committees formed to specifically address the functional mandate of the RBO.

For an RBO the size of the MBA to establish through its Founding Texts an organigram with an executive director and sub-departments (and further subsets of those departments) prior to the formulation of a Strategic Action Plan is a somewhat unorthodox approach. For reference, a visual representation of the MBA's organizational chart as outlined in the Founding Texts is included in Section 7.

This level of executive staffing, together with sub-staffing, can place an undue financial and administrative burden on a newly formed RBO. One of the biggest challenges (and risks) to an incipient RBO is to secure sustainable funds to cover operational costs without placing unnecessary burdens on its member states. The more closely the costs can be managed during the formative years, the stronger the RBO's financial base over the long-term. It is advisable to let the organizational structure take form only after a clear mandate and Strategic Action Plan are put in place. Structure and staffing will grow organically as the MBA develops a clearer understanding of its functionality. A more detailed analysis of the MBA's staffing needs is included in Section 7.

For comparative purposes, data shows four RBOs in southern Africa with catchment areas ranging from 400,000 km² to over 1.3 million km² that are defined as coordination-oriented with executive director positions. These four RBOs (Limpopo, Okavango, Orange, and Zambezi) each have four staff members with the exception of Zambezi (the largest), which is staffed with three people.[7]

As further comparison, both CICOS and NBA are coordination and implementation-oriented RBOs. Each are many times larger than the MBA. CICOS has nine total staff while the NBA has a staff of 77.[8]

4.7 Operational Budget

Most RBO budgets are divided into two components, (1) permanent operational costs, and (2) activity-related costs.

Most operating RBOs have budgets that fall into two general categories. The first is a regular budget which is defined as "the permanent and recurrent budget that is being allocated or agreed upon by its member countries to sustain the regular basic operations of the institution".[9] The second is the RBOs' program, project, or development budget which is typically raised for and committed to specific programs and/or activities. As the program or development budget expands, the regular budget will also tend to expand to fully support the activities on an ongoing basis.

Limited data exists on budgetary procedures for RBOs with catchment areas under 75,000 km². Smaller RBOs typically have coordination-oriented mandates without executive directorates. Budgets are generally funded through in-kind contributions from the member states with each covering its own costs incurred for meetings and other similar expenses. External studies and reports are usually funded by the those expected to be the primary beneficiaries.

With a catchment area below 75,000 km², the OMVG relies upon its Council of Ministers to determine the ongoing work of the organization. The Council also approves the annual operating budget and determines the financial contributions of member states necessary to meet its budget. No clear budgetary procedures have been found for the Buzi, Maputo, or Incomati RBOs.

[7] Financial Sustainability of International River Basin Organizations/Final Report, GIZ, August 2014, Table 3: Overview of Indicators for Sample RBOs (p. 18)
[8] Financial Sustainability of International River Basin Organizations/Final Report, GIZ, August 2014, Table 3: Overview of Indicators for Sample RBOs (p. 19)
[9] Financial Sustainability of International River Basin Organizations/Final Report, GIZ, August 2014, p. 12

Each of the four larger RBOs examined during the benchmarking exercise has a High Commissioner (except CICOS) who is responsible for the organization's financial operations. This Commissioner prepares the necessary budgets for ongoing operations and special works projects. In the case of CICOS, the Secretariat has budget preparation and implementation responsibilities which are approved by both the *Comité de Direction* and *Comité des Ministres*.

In 2013, CICOS (with its staff of nine) operated with a regular budget of US$1.4 million and development funds of US$1.7 million. The NBA (with a staff of 77) had a 2012 regular budget of US$2.8 million and a development fund budget of US$52.8 million.[10]

4.8 Funding and Cost-Sharing Mechanisms

Most of the RBOs examined primarily fund their operational budgets through the direct contributions of member states.

Almost all RBOs—whether small or large—have operational budgets which are primarily funded through member state contributions defined through cost sharing mechanisms. Such mechanisms either distribute the costs equally among all member states or are based one or more parameters. These parameters may include:

- Percentage of land area within the basin catchment area held by each member state;
- Population distribution of each member state within the basin catchment area;
- Population density of each member state within the basin catchment area; and
- Per capita income of each member state within the basin catchment area.

The MBA has yet to confirm its operational cost-sharing mechanism, although the Founding Texts propose several criteria. It is worth noting that the operational costs are unlikely to be shared equally between the two member states, given that 89% of the catchment basin lies within Togo's borders. A more detailed discussion of the cost sharing mechanism is included in Section 5.6.

Although donor funding may be available, it is expected that this would be channeled towards an activity budget (rather than the permanent operational budget).

In addition to member state contributions, RBOs also receive critical financial support from financial partners, donors, grants, loans, and revenue generated from the execution of projects. This level of support is typically focused on costs incurred outside of the annual operating budget.

External donors typically want to see their contributions directly support programs and projects that improve the overall condition of the river basin—whether economically, environmentally, or socially. Donors typically want to be assured that the member states have both the financial and political commitment, as well as the ability to support the RBO's operational costs—especially over the long-term. Long-term sustainable funding is, therefore, expected to be provided through a clear commitment from member states. Cost-sharing mechanisms will need to reflect the specifics of the

[10] Financial Sustainability of International River Basin Organizations/Final Report, GIZ, August 2014, Table 3: Overview of Indicators for Sample RBOs (p. 19)

river basin and agreements amongst the RBO's members—taking into account their economic capacity to make funding commitments on an annual basis.

Table 4 below generally indicates how the eight RBOs finance their operational budgets and other project-related costs external to the budget.

Table 4: RBO Cost Sharing Mechanisms

RBO	Cost Sharing Mechanism
Buzi RBO	• Member states cover expenses of their own delegates' participation in joint meetings. • Each member state bears the costs of measures and studies implemented within their own boundaries; joint studies are cost-shared.
Maputo RBO	• All costs are shared equally unless otherwise agreed to by the Commission.
Incomati RBO	• Costs are funded through member state contributions with each state bearing its own costs.
OMVG	• The Council of Ministers decides the work program of the RBO and decides the necessary financial contributions of each member state combined with all other financial resources, either internal or obtained from external sources by the Council.
VBA	• Primary financial support is provided by member states through cost sharing mechanisms with further support from financial partners, execution of projects, and water-related partnerships. • Cost sharing is based on proportion of basin territory, proportion of basin population and economic strength (% of basin GDP).
OMVS	• Funded through member contributions (according to benefits from joint works and contributions to administration) plus third party donor contributions. • For shared works/infrastructure projects, cost-sharing among members based on determined benefit from works to each member state.
NBA	• Expenses of the Authority, including those related to the Executive Secretary, are approved, for each fiscal year by Council of Ministers. • The annual operating budget is financed by equal contributions from each member state. • Since 2000, a key parameter has been in use which considers the basis of member state's past and expected benefits derived from exploitation of the basin's resources.
CICOS	• Financial resources come from member states, income from CICOS activities, loans, grants and other donor funding. • Primary key cost-sharing is based on percent of member states' territory within catchment basin. • 70% of CICOS regular budget is contributed by CEMAC members and deducted from 1% Community Import Tax.

Source: Transboundary Freshwater Database, Oregon State University (College of Earth, Ocean, and Atmospheric Sciences), www.transboundarywaters.orst.edu; Financial Sustainability of International River Basin Organizations/Final Report GIZ, August 2014, Annex Fact Sheets

Regardless of the financing mechanisms implemented, sustainable and secured financing is a necessary condition for the MBA to efficiently and cost-effectively carry out its mission. The MBA needs to focus on ensuring its short, medium, and long-term funding base is securely in place—both from member states and development partners.

4.9 Benchmarking Conclusions

The MBA is somewhat of an anomaly among RBOs in its relatively small catchment area (24,000 km²) compared to the heavy organizational structure proposed in its Statutes and Founding Texts. No precedent has been found to date of an equal organizational structure for a similar catchment area range. The MBA, however, has an opportunity to structure itself in a sustainable and effective manner—and thereby set an example for other small scale river basins to assume greater oversight of their water resources. This must be done in a financially sustainable and responsible manner and within the context of an implementable and realistic Strategic Action Plan—one which has yet to be finalized. A clear understanding of the reasoning behind the institutionalization of the MBA as an authority will be important in setting out its Strategic Action Plan.

The executive level staffing, together with sub-staffing, as identified in the MBA's Founding Texts is unusual for an RBO of its scale. Other comparable RBOs are not run by an executive directorate but by a committee or commission; or heads of state. A heavily-staffed operating budget can quickly place an undue financial and administrative burden on a newly formed RBO, as will be discussed in more detail in Section 7.

5 Guiding Principles

When evaluating potential financing mechanisms for the MBA, it is imperative to draw on experience from other RBOs in Africa and elsewhere. The benchmarking exercise in Section 4 provides key guidance in this context. Based on the results from the benchmarking exercise as well as the Team's experience in developing sustainable financing mechanisms for other RBOs, several guiding principles can be identified.

5.1 Independent Evaluation of Funding Needs

Besides identifying sustainable financing mechanisms, funding needs must be objectively assessed.

In the context of a study on financing mechanisms, it can be tempting to focus on identifying new financing mechanisms at the expense of analyzing the RBO's financing *needs*. However, given that RBOs are public institutions and are typically funded through public resources (a tax, user contributions, or direct government contributions), their budget should receive the same level of scrutiny as other public institutions. In this context, an overarching principle should be what is often called "value-for-money": ensuring that every dollar (or francs CFA) of public money spent yields the most benefits for the government and tax payers.[11] Closely related to value-for-money is the concept of "good governance," which can be interpreted as a transparent, efficient and equitable process of decision-making. Both value-for-money and good governance emphasize the judicious use of public funds, which is an essential consideration when evaluating an RBO's funding needs and identifying financing mechanisms.

With the above in mind, it is good practice to keep RBOs "mean and lean". In other words, RBOs should have sufficient funding to efficiently fulfill their mandate but remain small and flexible enough to be able to respond to changing needs. An objective evaluation of the needs for a RBO can be challenging, however, given that its roles and responsibilities may be different from other RBOs. In particular, a RBO that focuses mainly on coordination will have lower funding needs than a RBO that is responsible for carrying out a full program of knowledge generating activities or a RBO that has a mandate to invest in infrastructure.

Nonetheless, it is important to evaluate whether the proposed budget corresponds to a "mean and lean" RBO. In the context of the MBA, this requirement may be even more pertinent given the small size of the river basin and therefore the high impact on its users (should a user-pay model be adopted). To satisfy this requirement, various funding need scenarios will be discussed in Section 7.

5.2 Responsibility for Operating Costs

The operating costs of a RBO should be covered by (direct or indirect) contributions of the member states and should not materially rely on outside support.

[11] Value-for-money is achieved when a desired service or good is obtained at the lowest risk adjusted and quality adjusted price.

Ultimately, there are three potential groups of viable financial contributors to any RBO: (1) member state governments, (2) users, and (3) technical and financial partners. Technical and financial partners typically expect member states to fund the operating costs of RBOs—either directly, for example through direct contributions, or indirectly, through an additional tax on imports or user contributions. The operating costs typically include staff salaries, office expenses, and other operational expenses. Self-funding reinforces ownership and demonstrates member states' commitment to the RBO's mandate and success. Self-funding of operating costs also ensures that the RBO can continue to operate and fulfill its key objectives even if technical and financial partners were to (temporarily) reduce funding.

Technical and financial partners are also more likely to contribute to an RBO's activities and investment budget if its operating costs are adequately covered by other funding sources. An overlap may exist, however, between the operating budget and the activities budget. Staff salaries should arguably be part of the operating budget, but if certain staff's tasks are mainly associated with the activities under the activities budget, the distinction between operating and activities expenses may become less obvious.

Member states' and users' capability and willingness to contribute to the MBA's operating costs will be evaluated in detail in Section 6 whereas the sizing of its operating budget will be discussed in Section 7.

5.3 Coordination vs. Investment

RBOs should focus on coordination and delegate large scale investment to existing structures with competence and experience in this area wherever possible.

Depending on an RBO's specific mandate, encouraging and facilitating the construction of key water-related infrastructure can be one of its overarching objectives. However, the financing needed for infrastructure development tends to be of a different order of magnitude from the operating budget and typically requires highly specialized professionals which may not be part of the RBO's staff. Furthermore, in many countries, existing structures such as sectorial ministries have significant experience developing infrastructure projects. In those cases, the development and financing of infrastructure projects is best delegated to the relevant sectorial ministries in the member states.

In the case of the MBA, the Communauté Electrique du Bénin (CEB) is the most competent structure for hydropower development in the Mono River basin. As such, the CEB should remain in charge of developing and financing hydropower projects whereas the MBA can provide a coordinating and supporting role. More generally, the MBA should be complementary to existing structures and avoid being seen to compete with them. The MBA's role can be particularly relevant in suggesting and approving projects and identifying potential sources of funding. At the same time, in line with its mandate outlined in the Convention, the MBA may also take upon itself to realize projects that are of mutual benefit to Benin and Togo. Although not explicitly mentioned in the Convention, it appears reasonable to assume that such developments would exclude any hydropower projects undertaken by the CEB.

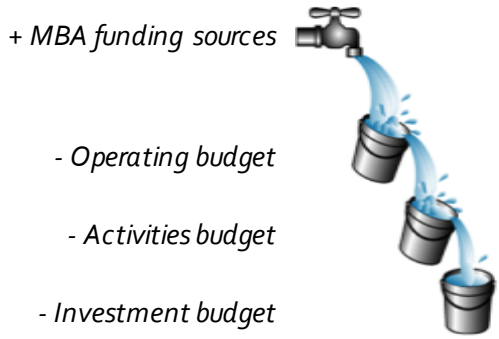
5.4 Predictable Revenue Streams

To ensure continuity and stability, RBOs should identify and implement reliable financing mechanisms that produce steady and predictable revenues.

The day-to-day management of a RBO can be significantly challenged by unreliable funding. For example, in the case of the CICOS, one of the member states, the Democratic Republic of Congo failed to make any annual contributions until 2013. In 2013, it made a single payment equal to roughly 52% of what it should have contributed over the period between 2004 and 2012. No further payments were made since to cover the remaining amount. The remaining CICOS member states (Republic of Congo, Central African Republic and Cameroun), however, have paid their contributions from an import tax, which has proven to be relatively stable. CICOS has been able to maintain operations through the stable import tax-based contributions while using the large but unreliable DRC contribution mainly to fund investments in equipment. Other RBOs have experienced similar challenges, with member states not paying their contributions on time or in full.

One of the objectives of this Study is to identify steady and predictable financing sources to ensure the MBA's financial stability. To the extent that the revenue sources used to fund the MBA are not stable or reliable, the portion of the revenues that is relatively stable should be used to fund the MBA's operating costs whereas the fluctuating portion can be used to fund activities and (if and where appropriate) investments. Borrowing from public-private partnership (PPP) infrastructure financing structure, one could look at this as a cash waterfall, in which the MBA revenues first fund operating costs, after which the remaining revenues can be used to fund activities and investments.

Figure 1: MBA Cash Waterfall



Source: RebelGroup

This approach would most likely provide sufficient funding to ensure the MBA's continuing operations while requiring some flexibility in the activities and (if and where appropriate) investment budgets.

5.5 Simple Financing Mechanisms

RBO financing mechanisms need to be relatively simple and implementable to allow the MBA to develop long-term budget plans.

The potential RBO financing mechanisms will be discussed in more detail in Section 6. Not all financing mechanisms, however, are equally reliable (as discussed earlier), nor easily implementable.

For example, "user fee" or "polluter fee"-based (*usager-payeur* or *pollueur-payeur* system) funding sources tend to be highly complex and more difficult to enforce. For a "polluter-fee"-based approach, it can be challenging to determine the price that polluters would need to pay for the pollution they generate (see Section 6.5 for more details). Similarly, a "user-fee"-based system can be challenging to establish, as users will only agree to pay if a clear service is provided in return for the fee. In the case of IWRM, it can be difficult to demonstrate the value of the service being provided by the RBO to the water users, especially in the short run.

When analyzing each of the financing mechanisms in Section 6, special attention will be paid to their overall complexity to ensure that the retained financing mechanisms do not introduce unnecessary complications. Overall, it is important to identify and develop financing mechanisms that are sufficiently simple to implement and reliable enough to allow the MBA to develop long-term budget plans.

5.6 Fair Cost Sharing

Besides efficiency and simplicity, cost sharing arrangements should consider capacity to pay and equity/fairness.

One of the debates in financing transboundary RBOs is how to share costs between member states. A first approach proposes that member states share the costs equally. This can be attractive if the benefits provided to, and the relative size of the member states are similar. A second approach determines the cost allocation based on several criteria, such as the relative size of the member states (or their economies, which may reflect their relative capacity to pay), their share of the river basin, or the benefits they expect to obtain from the RBO's activities.

When establishing cost-sharing parameters, it is important for the RBO to consider the principles of fairness and equity. Disagreements among member states can lead to refusal to make timely financial contributions. Equity and fairness can be looked at from two different perspectives – one focused on key-based parameters and the other on equal sharing. RBOs appear to follow different approaches—what works for one RBO may not work for another. Cost-sharing may also shift over time from equal contributions to parameter-based criteria, or vice versa.

The financial regulations contained in the MBA's Founding Texts reference multiple criteria to determine the contribution of each member state, effectively adopting the second approach:

1. **Catchment area:** The catchment area (in km^2) of the river basin in the respective member state;
2. **Population:** The number of inhabitants residing in the catchment area of the river basin in the respective member state portion of the basin; and
3. **Income:** The annual per capita income.

The financial regulations also mention an equally sized solidarity contribution of 30% of the operating budget be shared by both member states—integrating principles of fairness and equity. The financial regulations contained in the Founding Texts do not provide guidance as to the relative weighting of the three above criteria, nor do they specify how the exact calculations should be performed.

Assuming equal weighting of the three criteria and prorating the catchment area, population and GDP, the above mechanism would produce the following result:

Table 5: MBA Cost Sharing Mechanism Results

Criteria	Weighting	Benin	Togo	Total
Catchment area		3,000 km²	21,000 km²	24,000 km²
Catchment area - prorated share	*1/3*	12.5%	87.5%	100.0%
Inhabitants in basin		734,000	1,425,000	2,159,000
Inhabitants in basin - prorated share	*1/3*	34.0%	66.0%	100.0%
GDP per capital		$805	$636	$1,441
GDP per capital - prorated share	*1/3*	55.8%	44.2%	100.0%
Variable contribution share		***23.9%***	***46.1%***	***70.0%***
Solidarity contribution share		***15.0%***	***15.0%***	***30.0%***
Overall cost sharing		**38.9%**	**61.1%**	**100.0%**

Sources: MBA Founding Texts; Transboundary Waters Assessment Programme (www.twap-rivers.org), RebelGroup

Based on the above, the financial regulations suggest that Benin and Togo would be responsible for approximately 39% and 61% of the budget, respectively.[12] Although the mechanism clearly embraces both approaches towards cost sharing, the ultimate agreed cost sharing mechanism will be the result of negotiations between the two member states. Prior to adopting a formal cost sharing mechanism, the member states must agree on: 1) the appropriate weighting for the three indicators; 2) the manner in which they will be combined and translated into the cost-sharing mechanism; 3) the statistical source used to determine these indicators; and 4) the procedures for, and frequency with which these indicators will be updated. Regarding the last point, the number of inhabitants residing in the catchment area as well as the annual per capita income will evidently change over time, and procedures will need to be established to streamline this process. The remainder of this report assumes that the above interpretation of the cost sharing mechanism between Benin and Togo will be applied.

[12] During the workshop organized to validate the Study in December 2016, the workshop participants confirmed the Study's overall calculation method outlined above.

6 Analysis of Financing Mechanisms

This section identifies and analyzes financing mechanisms that have been used by RBOs globally as well as select additional innovative financing mechanisms that might be implemented to identify best practices and appropriate financing solutions for the MBA. The financing mechanisms considered in this section largely align with the potential revenue sources identified in the MBA's financial regulations in the Founding Texts (see Section 3.1.3).

6.1 Member State Direct Financial Contributions

Although direct contributions from member states are easy to implement and common across RBOs globally, they can be unstable and unpredictable.

A simple mechanism to finance a RBO is through direct financial contributions from member states. This financing mechanism is used by RBOs globally, including the Volta Basin Authority and the Niger Basin Authority. Other RBOs combine direct financial contributions with other financing mechanisms. For example, the CICOS receives direct financial contributions from the DRC (and soon Angola) whereas its other members contribute through an import-based tax (see below).

Although direct financial contributions are relatively simple to implement and have low transaction costs, they are also prone to high volatility. Government authorities can decide at any moment to delay their RBO contributions or prioritize other spending. This funding source could therefore result in significant inter-annual fluctuations and arrears if member states withhold their contributions for numerous years.

6.2 Member State In-kind Contributions

Although in-kind contributions by member states can be more significant than direct contributions, donors may perceive them as less of a commitment than direct contributions.

Member states can also provide in-kind contributions to RBOs, including office space, staff, and hosting meetings or events. It is common, for example, for the member state hosting an RBO's headquarters to provide office space free of charge. The value of in-kind contributions may be substantially higher than direct financial contributions. For example, the value of in-kind contributions by member states of the Nile Basin Initiative between 1999 and 2011 is estimated at $19.3M compared to direct financial contributions of $6.5M.[13]

As salaries typically represent a significant component of the annual budget, RBOs can substantially reduce their financial needs if member states agree to staff the agency. Staff secondments may also be an option, but could result in excessive staff turnover. Furthermore, the RBO may have less control over the profile or experience of its future staff than if it were to recruit staff directly under a competitive recruitment process.

[13] Financial Sustainability of International River Basin Organizations/Final Report, GIZ, August 2014, p. 20

Donors may perceive direct financial contributions as a greater commitment from member states than in-kind contributions. As such, direct financial contributions could lead to higher donor support than in-kind contributions of the same value.

6.3 Dedicated Tax

A dedicated levy such as an import tax is a more stable and reliable funding source than direct member state contributions, but may not have a direct connection with the services provided by the MBA.

RBOs can also be funded through a dedicated tax or levy. The Economic and Monetary Community of Central Africa (CEMAC), for example, uses an import tax to fund its specialized institutions, including the CICOS (see textbox below).

Textbox 6: CICOS dedicated tax case study

Import Tax-Based Revenue: The CICOS Case Study

The CICOS is funded through a combination of direct financial contributions from the DRC (and soon Angola) and import-based tax revenues from its other members (Cameroun, Congo, Central African Republic, and soon Gabon), which are all member of the CEMAC. Besides Cameroun, Congo, Central African Republic, and Gabon, the CEMAC has two other members that are not part of the CICOS: Chad and Equatorial Guinea. Although the CICOS was originally established as an independent international commission, soon after its creation in 1999, it was converted into a specialized institution of the CEMAC.

In 2002, the CEMAC heads of state established an import tax – *Taxe Communautaire d'Intégration* or TCI – to cover the costs of this regional organization. The TCI is a flat tax of 1% that is levied by its member states on all goods imported into the CEMAC region. Each member state is expected to transfer the full amount of import tax proceeds to the CEMAC on a regular basis. Although in practice not all tax proceeds may be transferred to the CEMAC, these tax revenues fund not only the operations of the CEMAC itself but also those of its specialized institutions, including the CICOS. Of the CEMAC's overall tax proceeds, the CICOS receives less than 2%.

In recent years, CEMAC has undertaken steps to improve the tax recovery rate to increase its revenues, which should also benefit the CICOS. As the membership of CICOS and CEMAC do not entirely overlap, the two CEMAC countries that are not members of the CICOS (Chad and Equatorial Guinea) effectively subsidize the CICOS' operations.

The TCI has provided the CICOS with a relatively stable source of revenues that has allowed it to continue its operations when direct contributions from the DRC were not forthcoming.

As is clear from the above, an important advantage of this financing mechanism is its reliability. A dedicated tax or levy may also be easier to implement than a user fee or polluter fee-based system (see below), although this will ultimately depend on a variety of factors, including the number of countries that will be involved and the goods or services that will be taxed. In the case of the CICOS,

it is also important to note that the TCI was not established by the CICOS nor was it established specifically to fund the CICOS. Instead, the import tax was established to fund the CEMAC and as a corollary function provides funding for the CICOS and a host of other regional organizations.

A potential drawback of a dedicated tax or levy is that—depending on what goods or services are being taxed—there may be no direct link between the tax and the services provided by the RBO. For example, the import tax used by the CEMAC applies to all imported goods but the proceeds are used for purposes that have no direct link with trade. Furthermore, the tax may be applied to a geography or set of countries that does not necessarily coincide with the watershed, as is currently the case for the CEMAC.

Because tax revenues are directly transferred to the RBO without confirmation and active involvement by national governments, an import tax could reduce the interest of member states in the RBO's work. Finally, import taxes may be subject to changes if, for example, a free trade zone is established (an issue with CICOS, for example, as the CEMAC attempts to negotiate an Economic Partnership Agreement with the European Union).

6.4 User Fee-Based Financing

A user fee-based financing mechanism may be difficult for the MBA to justify until the authority is able to provide a clear service to its users.

Under a user fee-based financing mechanism, users are expected to pay for water resources. Large water consumers such as hydroelectricity, irrigation, industry, and mining could be asked to pay a charge for the right to withdraw a certain amount of water. Similarly, commercial boats could pay a passage fee. To justify such a system, the RBO must be able to provide a clear service to its users. In the context of IWRM, however, it can be difficult for a RBO to demonstrate the value of the service.

Another challenge for user fee-based funding is that member states may decide not to transfer (all) user charge revenues to the RBO. Several transboundary RBOs in developing countries (Mekong River Commission, Niger Basin Authority) considered a user fee based financing mechanism but experienced conflicts of interest between member states. Non-transboundary RBOs have been more successful in implementing user fee-based financing mechanism. Examples include Burkina Faso, where large water users such as mining companies help support sub-national RBOs, as well as France and the Netherlands, where user fee-based financing mechanisms have been used for many decades, generating substantial revenues for their respective organizations. In the latter case, the user fee-based revenues are used to not only support the operations of the RBO but also implement specific projects. Although raising such revenues through user fees may be possible in the long-run, for the purpose of the Study, user fee-based financing mechanisms will be mainly intended to support the RBO's operations.

In both MBA member states, the concept that water has an economic value in all of its competing uses—and should be recognized as an economic good (one of the five key principles of IWRM)—has been firmly established.[14] Indeed, the idea of "*l'eau paie l'eau*" is widely used by officials and NGOs in

[14] Global Water Partnership, http://www.gwp.org/en/The-Challenge/What-is-IWRM/IWRM-Principles/

Benin and Togo alike. The concept is also enshrined in both countries' water law as well as the MBA's Convention. There appears to be a consensus, however, that a user free-based financing mechanism must take into consideration capacity to pay. Any user fee-based financing mechanism should mainly target large water users and spare subsistence farmers. Although user fee-based funding for the MBA receives significant stakeholder support, it is important to acknowledge that this would be a groundbreaking financing strategy with limited precedent for transboundary RBOs.

6.5 Polluter Fee-Based Financing

A polluter fee-based system can be challenging and costly to enforce, and if penalties are set too high, could generate revenues beyond required.

Under a polluter fee-based financing mechanism, polluters pay for the damage caused by their pollution. The penalty that polluters pay should somewhat accurately reflect the externalities created by the pollution. If the penalty is too low, a polluter fee-based structure could create a "right to pollute" without encouraging behavioral change (such as installing water filters if the amount to be paid to compensate for negative externalities is high). If the penalty is set roughly equal to the value of the externalities created by the pollution, a polluter fee-based financing mechanism could generate substantial revenues—potentially beyond the RBO's funding needs. In that case, the excess revenues should be paid back to the member states. If the penalty is too high, the system could negatively impact the overall economy as beneficial economic activity could be discouraged.

If the penalty is set by the RBO and all associated revenues also flow to the RBO, the RBO could ultimately generate revenues beyond its funding needs. A polluter fee-based financing mechanism can therefore only work if the revenues are collected by an independent entity that also ensures that the penalties are set appropriately. A polluter fee-based financing mechanism also requires that the polluters can be identified and monitored through an effective control system ("water police" or "*police des eaux*"). In the case of the MBA, key potential polluters that may be able to contribute to its operating costs could include mines, (small) industries, and users of pesticides.

For a polluter fee-based financing mechanism to be cost effective, the pollution penalties charged should be based on a limited number of easy to measure criteria, such as the size of an industrial plant or mine (measured in production per year) and possibly the nature of the pollutant. This will minimize the administrative burden associated with implementing this mechanism.

A wide-ranging GIZ study on transboundary RBO financing mechanisms in developing countries found that none of the RBOs had implemented a polluter fee-based financing mechanism.[15] In developed countries such as France, polluter fee-based financing mechanisms have been used to support the RBO's operating costs and implement projects. However, this was only after user-fee based financing was shown to be successful over a sustained period of time. Although the MBA could consider polluter fee-based financing, a user-based financing mechanism would likely be significantly easier to implement and enforce, especially in the short term. As was the case for user-based

[15] Financial Sustainability of International River Basin Organizations/Final Report, GIZ, August 2014

financing, the concept of polluter fee-based financing is enshrined in both countries' water law as well as the MBA's Convention.

6.6 Sale of Data and Services

Although some RBOs generate revenues from the sales of products and services, this would likely be difficult for the MBA to achieve in the early years of operations.

Another funding source is the sale of products, such as maps and data, or services such as education. Many RBOs sell their hydrological data to water users. The Mekong River Commission and the Nile Basin Initiative also offer consultancy services to external customers.

Revenues from the sales of products and services tend to be quite limited, however. Also, selling products and/or services may distract ROB staff or reduce the time they can allocate to their core tasks.

In the case of the MBA, there appears to be limited potential to generate substantial revenues from the sale of projects and services. Because the MBA is in its infancy, it would be advisable to focus on core tasks and avoid being distracted by other, non-core activities.

6.7 Project Management Fees for Infrastructure Development

Project management services could help generate revenues for RBOs with a project implementation-oriented mandate but must exceed incurred costs to be beneficial as a financing mechanism.

Depending on its mandate, a RBO may be responsible for a variety of activities related to the development and/or operation of infrastructure projects within the watershed area. For example, a RBO may lead the (pre-)feasibility studies, raising of financing, procurement, and/or construction of a new hydropower project. To be able to perform such services, the RBO will need to have the required staff and expertise. As such, the RBO would need to be compensated (either by the private developer or by other governmental entities) for the services it provides throughout the project's life.

In the case of the Niger Basin Authority (NBA), project management fees were one of multiple financing mechanisms proposed to cover its operating costs (along with member state contributions and an import tax supplement).[16] To the extent that the proposed services can be provided through the RBO's existing staff, project management fees may be able to help support the RBO's overall operating costs. However, if the RBO needs to attract new (potentially highly specialized) staff and/or incurs other costs to be able to perform the proposed project management services required, project management fees will only serve as a financing mechanism to the extent that those fees exceed the actual incurred costs by the RBO. Furthermore, for RBOs with a mandate that is limited to coordination, project management fees are not a viable option.

[16] Etude Stratégique sur le Financement Autonome et Durable des Activités de l'ABN, BRL Ingénierie/ICEA, January 2010, page 169.

The MBA's mandate includes project implementation, according to the Convention. However, beyond the hydropower projects currently under development by the CEB, no other infrastructure projects appear to have been identified to date. As aforementioned, it would be advisable for the CEB to lead any hydropower development within the watershed. Without the prior identification of other infrastructure projects, fees for project management related to infrastructure development may not be a viable financing mechanism for the MBA in the short- to medium- term.

Management fees for non-infrastructure projects are discussed in the next paragraph.

6.8 Management & Administration Fee

With management and administration fees, donors effectively co-fund the MBA's operating budget, which could result in excessive dependency on donors.

Another potential source of RBO funding is management and administration fees. For example, the Mekong River Commission charges 11% in management and administration fees for any donor-funded activities. Effectively, this means that technical and financial partners co-fund its operating budget. International agencies like UNICEF use a similar structure when they implement projects using external funds from other donors.

Donor contributions to a RBO's operating budget may be justifiable if RBO staff is directly involved in the implementation of the donor-funded action plan. However, management and administration fee structures could lead to unjustifiable increases in the operating budget. Furthermore, the RBO may become too dependent on external funding and struggle to continue core operations when donors are no longer willing or able to provide funding. Lastly, donors' willingness co-finance a RBO's operation budget through management fees and administration would need to be considered.

Textbox 7: Management & administration fee case study

Mekong River Commission Case Study

The Mekong River Commission's 2012 operating budget of $3.23M was split between member country contributions of $1.83M (57%) and a management and administration fee on donor-funded activities of $1.40M (43%). Because the work program budget of $15.4M was entirely paid for by technical and financial partners, the Mekong River Commission was highly donor dependent. The above figures do illustrate that a large work program budget can raise substantial funds through a management and administration fee.

Notwithstanding, the Mekong River Commission member countries had committed in 2000 to cover 100% of the operating budget through member countries contributions by 2014. As they were unable to meet this commitment or reach sufficient progress with streamlining the organization, donors became reluctant to continue to pay the management and administration fee. As a result, the Mekong River Commission is currently undergoing a significant restructuring with reportedly a reduction of some 50 staff. Going forward, the Mekong River Commission is expected to be substantially less reliant on donor funding for its budget and has adopted a strategic goal to (i) streamline the organization centered around core river basin management functions and

(ii) reach 100% member country funding by the year 2030 of both operating and work program budgets.

As shown in the Mekong River Commission case study, management and administration fees could co-fund the MBA's operating budget in the medium-term. In the long-term, however, the Mekong study demonstrates that donors are unlikely to indefinitely support the MBA's operating budget through a management and administration fee. In the early years and until the MBA has obtained commitments from donors to fund its activities budget with agreement to a management and administration fee, the MBA will need to rely on other funding sources. Donors will most likely want to see a clear commitment from the two member states to ensure that the MBA is a both viable and largely an independently-funded institution.

6.9 Dividends & Releases from (Investment) Fund

Although establishing an investment fund may be challenging in countries with constrained public budgets, an integrated water management fund could be supported by user fees.

Member states could establish an investment fund and use its dividends to pay for the MBA's operations. This would require a significant upfront investment but would also ensure the RBO's financial independence. In practice, setting up a fund may be challenging in countries with constrained public budgets. In the context of the MBA, setting up an investment fund would most likely put too much pressure on already highly constrained public budgets.

Alternatively, member states could create an "integrated water management fund" that is supported through user fees. Benin and Togo have made legal provisions to establish such a fund, although neither country has a functioning IWRM fund at present. Although the modalities may be slightly different, this financing approach is effectively equivalent to the user fee-based financing mechanism aforementioned and could act as a natural transition from member state contributions to user fees.

6.10 Donor Funding

Donor contributions are likely to be available to support activities and projects, but not to fund operational costs.

Lastly, member states can request support from the donor community to fund a RBO's operations and/or activities. Historically, technical and financial partners have played an important role in promoting IWRM—both within countries and for transboundary RBOs. An example is GIZ's ongoing support to CICOS. Since 2006, GIZ has funded roughly €9M in activities and investments to develop CICOS' capacities, build a training center, and improve water management. Similarly, the World Bank and other multilaterals provide substantial financial support to the VBA to implement key activities.

It is important to note that the donor community typically does not support a RBO's long term operating costs. Third party donors and other financial contributors expect member states to cover the operational budget and will only fund RBO activities once operational costs have been covered. Technical and financial partners typically prefer to support programs and projects that improve the river basin's overall condition or help build capacity.

In the case of the MBA, the operating costs will need to be covered through (a combination of) the funding sources listed above whereas its activities and investments could potentially be funded by contributions from external sources.

6.11 Private Investment and Public Private Partnerships

Private investment, for example through Public Private Partnerships (PPPs), can be leveraged to finance individual projects with a positive financial return, but will most likely not be available to cover an RBO's operational costs.

Many governments are turning to private investors to finance projects and critical infrastructure, often through PPP structures. Examples include toll roads, hydropower plants, and social infrastructure such as prisons or hospitals. When projects have the potential to not only generate economic (societal) benefit but also a positive financial return, investors are willing to put their money at risk, knowing that they can expect to earn a return that is commensurate with the risk they are taking. Investors may include domestic and international firms, banks, as well as individuals.

In the case of emerging countries, one potential source of financing could be the country's diaspora. These individuals may be interested in investing in specific projects or assets to earn a financial return. In the case of the Mono River basin, potential areas for private investment could include fishing, tourism, hydropower, river transport, etc. However, it is highly unlikely that private investors would be willing to support the MBA's operations if there is no reasonable expectation of a financial return. Indeed, the MBA is not expected to generate a profit, even though its activities will hopefully support economic activity within the basin. As such, the MBA may want to leverage this source of innovative financing for specific initiatives that could generate both economic (societal) and financial returns but focus on other sources of financing to cover its operating costs.

6.12 Financing Mechanisms Analysis Conclusions

The analysis shows that viable financing mechanisms for the MBA's operating budget may include: member state contributions, a dedicated tax, user fee-based financing mechanism, management and administration fees, and donor contributions.

Which financing mechanisms the MBA ultimately retains will depend how quickly the financing mechanism can be established and generate funding (for example, a 2-year horizon, 5-year horizon). The selected financing mechanisms will also depend on the expected evolution of these mechanisms over time. Other criteria include the expected revenues to be generated; the reliability of the financing mechanism; the complexity of implementation; technical, legal, or political constraints; and transaction costs.

Based on the above criteria, the most attractive sustainable financing mechanisms for the MBA include:

- Member state contributions (financial or in-kind);
- Dedicated tax;

- User fee-based financing, potentially in combination with polluter fee-based financing in the long-term;
- Management & administration fees; and
- Donor contributions (for specific activities and/or investments).

Financing mechanisms associated to infrastructure development will only be relevant if the MBA and its member states decide to develop large scale infrastructure projects above and beyond hydropower (which the Team expects to be managed by the CEB). Until such projects are identified, financing mechanisms associated to infrastructure development will not be applicable to the MBA.

The other financing mechanisms discussed in this chapter are either difficult to implement, do not generate substantial revenues, or are not expected to be feasible in the current economic context of Benin and Togo. Based on the funding needs analysis in Section 7, the appropriate financing mechanisms and the MBA's overall financing strategy for the short, medium, and long-term will be determined and analyzed in more detail in Sections 8 and 9.

7 MBA Funding Needs Scenarios

To identify the most appropriate financing mechanisms for the MBA, the Study first determined the MBA's funding needs, both in terms of overall requirements and expected evolution over time. The proposed organizational structure outlined in the MBA Founding Texts was used to calculate annual funding requirements.[17]

The benchmarking exercise in Section 4 highlighted that an organizational structure with many full-time staff may place an undue financial burden on MBA member states. Many RBOs worldwide have been unable to fully staff their organizational structure even numerous years after formal establishment, usually due to funding constraints. Stakeholders in Togo and Benin confirmed that the MBA's organizational structure should be as light as possible to both: (1) limit the budgetary implications for member states, and (2) ensure the long-term sustainability and autonomy of the institution. Stakeholders cited examples such as the Niger and Volta RBOs, where member states have struggled to fulfill their annual contributions.

Due to the challenges faced by other RBO member states in meeting funding requirements (and in establishing the originally-anticipated organizational structures), the Study proposes three organizational scenarios. Scenario 1 reflects the organizational structure outlined in the MBA founding documents. The Study also proposes two alternative organizational structures with lower funding requirements (Scenarios 2 and 3). The purpose of the three organizational scenarios is to provide MBA decision makers with flexibility in determining the most appropriate organizational structure and budgetary implications, thereby increasing the likelihood of the institution's successful and timely establishment.

The Team notes that the funding needs analysis presented in this section and the funding strategies proposed in Sections 8 and 9 are expressed in real CFA (as opposed to nominal CFA).[18] Presenting budgetary items in real CFA enables a more objective comparison of expenses (and revenues) in different years. To determine the future funding allocation, an inflation adjustment will need to be applied. In a low inflation environment (as is currently the case in countries using the CFA), however, the impact of inflation will be relatively minor.

7.1 Scenario 1: Founding Texts Organizational Structure

Scenario 1 follows the organizational structure proposed in the Founding Texts. Section 7.1.1 provides an overview of the number of staff and functions proposed. Section 7.1.2 provides

[17] Note: During the validation workshop organized in December 2016, the consultants in charge of drafting the Strategic Action Plan confirmed that they had followed the organizational structure outlined in the MBA Founding Texts. However, the anticipated human resources outlined in chapter 4 of the draft Strategic Action Plan appear to include certain positions that are not envisioned in the Founding Texts, whereas other positions included in the Founding Texts' organizational structure appear to be missing. Because no justification for a different organigram was provided, this Study continues to use the organigram presented in the Founding Texts as a starting point for the analysis, in line with the discussions and recommendations of the workshop.

[18] In other words, all amounts shown are in 2016 CFA.

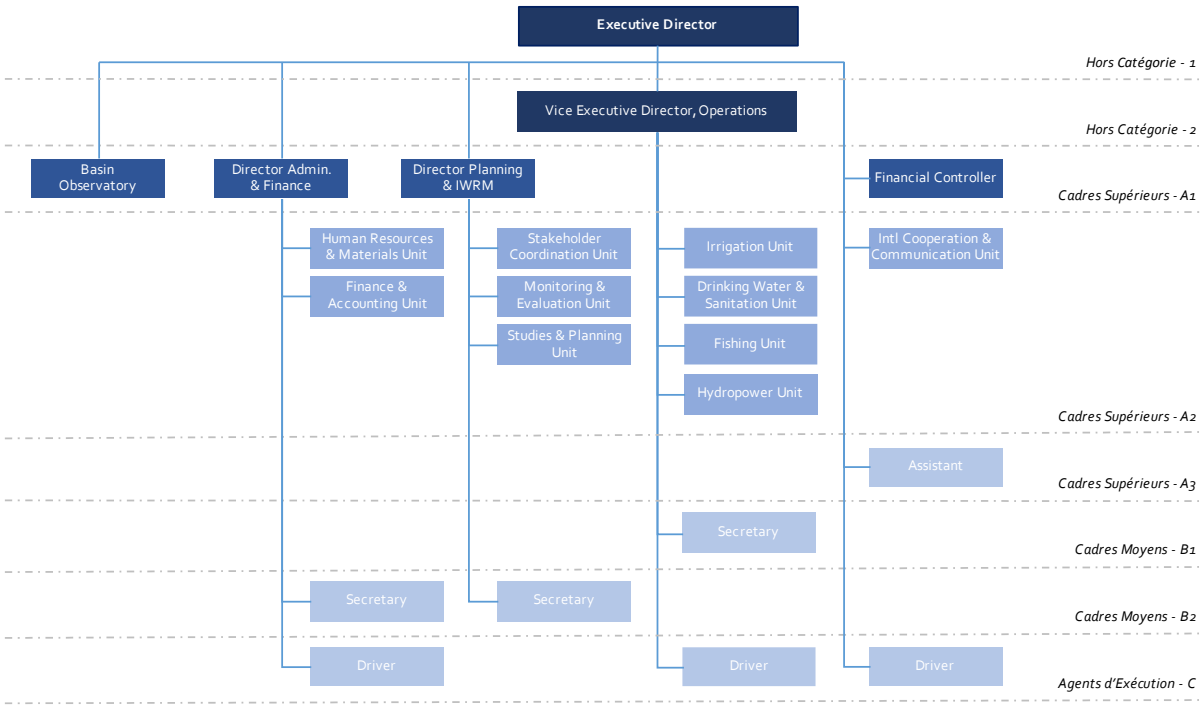
recommendations and considerations on how the MBA could transition towards the full structure over a period of five years.

7.1.1 The Founding Texts Organizational Structure

The Founding Texts propose an organizational structure that is comprised of 23 full-time staff, with specific units spanning four sectoral areas and four additional functional areas.

The figure below illustrates the organizational structure of the MBA outlined in the Founding Texts. This structure includes 23 full-time staff, including an executive director, a vice executive director, 4 director level positions, and 17 other staff (11 *cadres supérieurs*, 3 *cadres moyens*, and 3 *agents d'exécution*). The organizational structure proposes establishing units in four sectoral priority areas: irrigation, drinking water and sanitation, fishing, and hydropower. It also proposes independent units responsible for cooperation and communication; stakeholder coordination; monitoring and evaluation; and studies and planning.

Figure 2: Organizational Structure as Outlined in Founding Texts (Scenario 1)



Source: MBA Founding Texts, RebelGroup

7.1.2 The Transition Period

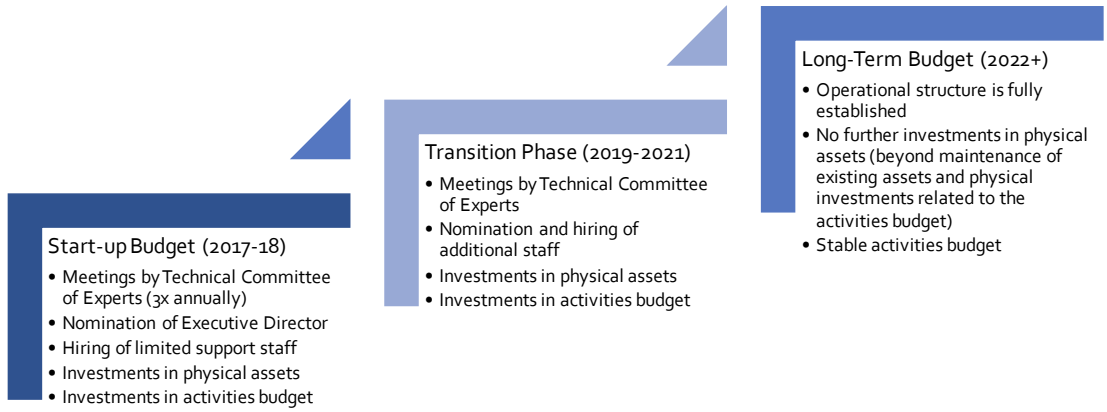
Experience suggests that member states will require a transition period to establish and operationalize the organizational structure proposed.

Comparable RBOs have established a modest organizational structure with limited full-time staff during the initial years of operations. A modest organizational structure during the early years has several advantages. (1) First, it limits the immediate budgetary impact, allowing member states to ease into their contributions. Limited (and growing) annual contributions during the early years may help set a precedent of member states fulfilling their annual contributions. (2) Second, a modest

organizational structure in the early years sets realistic objectives for the authority's establishment, increasing the likelihood for success and support by stakeholders. (3) Third, it allows the MBA to reconfirm its strategic priorities during the initial years and hire full-time staff as the strategic need arises. Participants in the validation workshop confirmed the importance of a gradual evolution of the MBA in line with the execution of activities in the Strategic Action Plan.

The figure below provides an indicative overview of the MBA's potential evolution over time. In the figure, a two-year "start-up" period would be followed by a three-year transition period, and the long-term budget and operational structure would be in place by year six. Further detail on the budgetary implications of the three phases is provided below.

Figure 3: Overview of Evolution of the Operating Budget (applicable to Scenarios 1-3)



Source: RebelGroup

7.1.2.1 The "Start-up" Phase

The Study proposes a light organizational structure during the first two years of operations (2017-18) funded through a start-up operating budget.

During the first two years of operations, this Study proposes that only the executive director be nominated (along with limited direct support staff), funded through a "start-up" operating budget. The MBA Founding Texts provide guidance on cost items including pay scales and staff allowances. The staff compensation proposed in the Founding Texts is based on the VBA's pay scale, which is reasonable given the organizations' comparable missions and geographical proximity. For other cost items, experience from other RBOs was used to determine realistic cost estimates. The table below provides a summary of the proposed start-up annual operating budget for the MBA under Scenario 1.

Table 6: Startup Operating Budget

Element	Year 1 (2017)	Year 2 (2018)
Salaries and Benefits	55,020,000	55,020,000
Office Expenses	21,168,000	21,168,000
Vehicle Operating Costs	5,750,000	5,750,000
External Services	6,300,000	6,300,000
Functioning of National Focal Point Structures	2,333,000	2,333,000
Meetings and Missions	36,667,000	36,667,000
Operating Budget	**127,238,000**	**127,238,000**

Source: RebelGroup

As illustrated in the table above, the operating budget contains line items for full-time staff (only the executive director and support staff); the operations of the office space and vehicles; and external services such as legal advisory. The operating budget also includes allocations for meetings, missions, and workshops organized by the MBA's permanent bodies and entities (Council of Ministers, Technical Committee of Experts, and Forum of Stakeholders). During the first two years, the Technical Committee of Experts is budgeted to meet three times a year to help operationalize the MBA (more than the statutory requirement of once a year).[19]

7.1.2.2 The "Transition Phase"

The MBA would subsequently enter a three-year transition period in which it would continue to hire staff progressively to execute its priority tasks and reach its operating capacity by the end of year five.

As the MBA demonstrates its value and stabilizes its operations and funding, it can transition towards a coordination and implementation-oriented mandate. The Study assumes a transition period of three years, with the MBA reaching its full operating capacity after five years. Using the same assumptions as for the startup operating budget, the table below shows the long-term annual operating budget under Founding Texts Organizational Structure Scenario. A detailed overview of the Scenario 1 budget can be found in Annex IV.

[19] Note: The Regional Platform of Civil Society Organizations for the Mono Basin (one of the participants in the Forum of Stakeholders) is excluded from the MBA's budget. The Regional Platform of Civil Society Organizations for the Mono Basin is not part of the MBA's overall organizational structure and is therefore expected to secure its own funding.

Table 7: Long-term Annual Operating Budget under Scenario 1 (Year 6 Onwards)

Element	Year 6+
Salaries and Benefits	321,812,000
Office Expenses	84,672,000
Vehicle Operating Costs	17,250,000
External Services	31,500,000
Functioning of National Focal Point Structures	2,333,000
Meetings and Missions	38,001,000
Operating Budget	**495,568,000**

Source: MBA Founding Texts, RebelGroup

7.1.2.3 Investments in Physical Assets & Implementing the Strategic Action Plan

For Scenario 1, the budget for the first five years also considers investments in physical assets and costs associated with implementing the Strategic Action Plan.

In addition to the operating budget described in the previous sections, the Study also assumes that during the first five years the MBA will need to budget for: (1) investments in physical assets (purchase of vehicles, office furniture, IT equipment, etc.), and (2) the costs associated with implementing the activities proposed in the Strategic Action Plan.[20] These indicative costs are provided in the tables below.

Table 8: Investments in Physical Assets and Strategic Action Plan

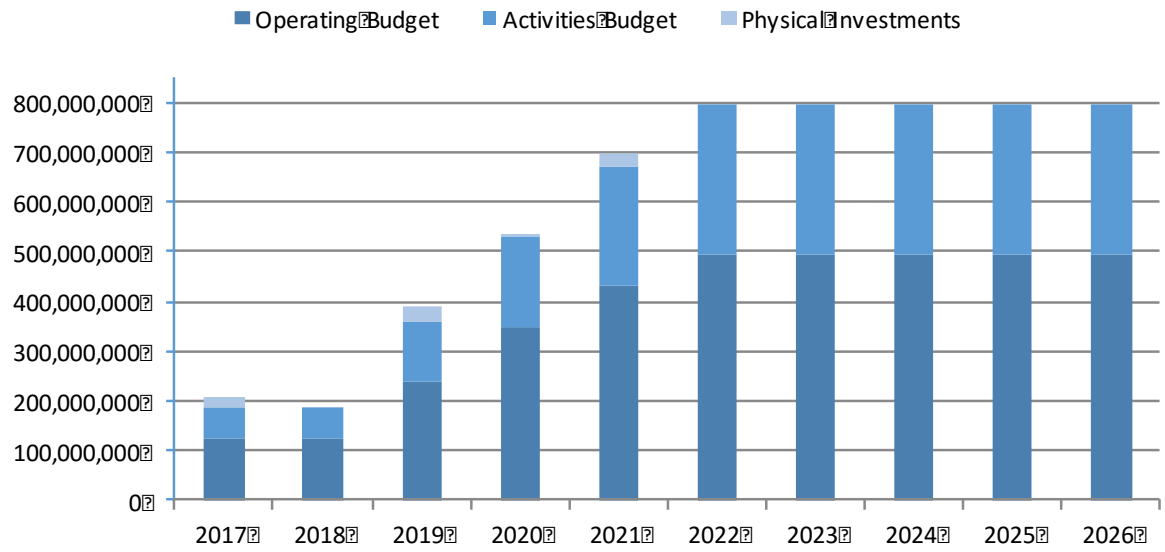
Year	Physical Investments	Activities Budget [proxy estimates]
Year 1 (2017)	22,872,000	60,000,000
Year 2 (2018)	-	60,000,000
Year 3 (2019)	30,744,000	120,000,000
Year 4 (2020)	7,872,000	180,000,000
Year 5 (2021)	22,872,000	240,000,000
Year 6+ (2022+)	-	300,000,000

Source: RebelGroup

In practice, the evolution of the MBA's funding needs during the first five years will likely vary from the estimates provided in the Study. Beginning in year six, however, the projected operating and activity funding needs are expected to be stable. The figure below illustrates the MBA's funding needs both during and after the five-year transition phase.

[20] Note: The estimates for the implementation of the Strategic Action Plan are proxy numbers that will need to be reconfirmed as more accurate estimates become available once the Strategic Action Plan is finalized. As the annual activities budget varies substantially between different RBOs, the Study has assumed a relatively modest long-term activities budget of 300,000,000 FCFA per year. This conservatively low estimate can be justified by the MBA's relatively small basin size and its focus on coordination.

Figure 4: Projected Funding Needs under Scenario 1



Source: RebelGroup

Establishing a lighter long-term organizational structure could be desirable and feasible as project staff could be externalized and full-time personnel hired progressively as the strategic needs arise.

As shown above, the organizational structure proposed by the Founding Texts has a substantial budgetary implication, even after allowing for a transition period. As aforementioned, experience shows that many RBOs have not been able to implement the organizational structures to which they initially aspired to due to budgetary constraints.[21] The Study recognizes that the MBA has not yet been established and therefore has the flexibility to define its operational structure to maximize the potential for long-term sustainability.

The next two sections propose alternative organizational structures with more limited full-time staff. Two considerations are worth noting. (1) First, the number of full-time staff as well as the functional and sectoral priorities proposed are indicative. In practice, the MBA should hire based on its strategic needs—functional and sectoral priorities will be based on the priorities outlined in the Strategic Action Plan and staff will be hired progressively to carry out specific tasks and priorities. The resulting organizational structure will, therefore, most likely differ from the structures proposed in the subsequent chapters. (2) Second, it is important to note that reducing the number of full-time staff does not imply that the MBA will be less able to carry out its mandate, to the extent that the MBA can externalize staff dedicated to managing and overseeing specific projects. Donor funding for the execution of specific projects can include funding for project management staff, allowing the MBA to undertake its mission while limiting the number of full-time staff in the operating budget.

[21] For example, the VBA currently operates with only a few staff members, despite an aspired-to organizational structure that is similar to that proposed for the MBA. Similarly, the CICOS currently only has one director in place compared to four directors anticipated in its organizational structure.

7.2 Scenario 2: Intermediate Organizational Structure

7.2.1 An Intermediate Organizational Structure

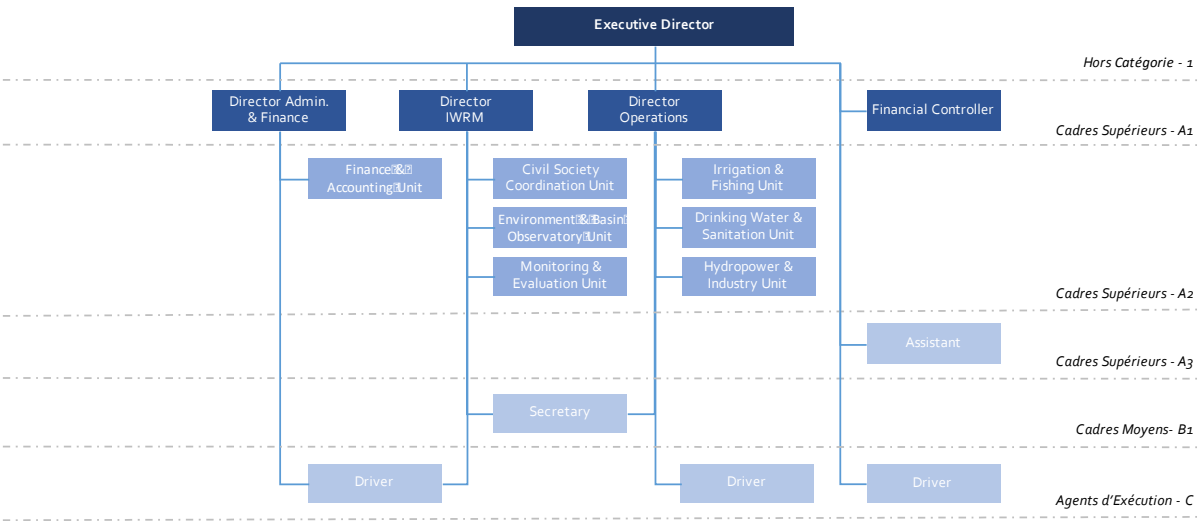
A long-term organizational structure with approximately 17 staff would be an alternative structure that may help ensure the MBA's long-term financial sustainability.

A first alternative to the Founding Texts Organizational Structure is shown in the figure below. Under Scenario 2, the MBA could have 17 full-time staff, including an executive director, 4 director level positions, and 12 other staff (8 *cadres supérieurs*, 1 *cadre moyen*, and 3 *agents d'exécution*). Key differences with organizational structure in Scenario 1 include:

- Eliminating the vice executive director position;
- Moving the basin observatory unit under a IWRM direction;
- Merging the irrigation and fishing units;
- Eliminating the human resources & materials unit and the international cooperation & communication unit; and
- Reducing the number of support staff from 7 to 5 people.

These proposed modifications would allow the MBA to substantially reduce its operating budget while still fulfilling its overall mandate, to the extent that donor funding for projects and activities can include provisions for temporary project management and monitoring staff.

Figure 5: Intermediate Organizational Structure (Scenario 2)



Source: RebelGroup

7.2.2 The Transition Period

Similar to Scenario 1, Scenario 2 proposes a light organizational structure during the first two years of operations, with a subsequent three-year transition phase.

During the first two years of operations, the Intermediate Organizational Structure would be identical to the Founding Texts Organizational Structure (Scenario 1). During the first two years, the

MBA would function with an executive director and limited support staff. The costs (and cost assumptions) would be identical to those used to develop the "start-up" operating budget for Scenario 1. The table below shows the long-term annual operating budget for Scenario 2. A detailed overview of the above budget can be found in Annex V.

Table 9: Long-term Annual Operating Budget under Scenario 2

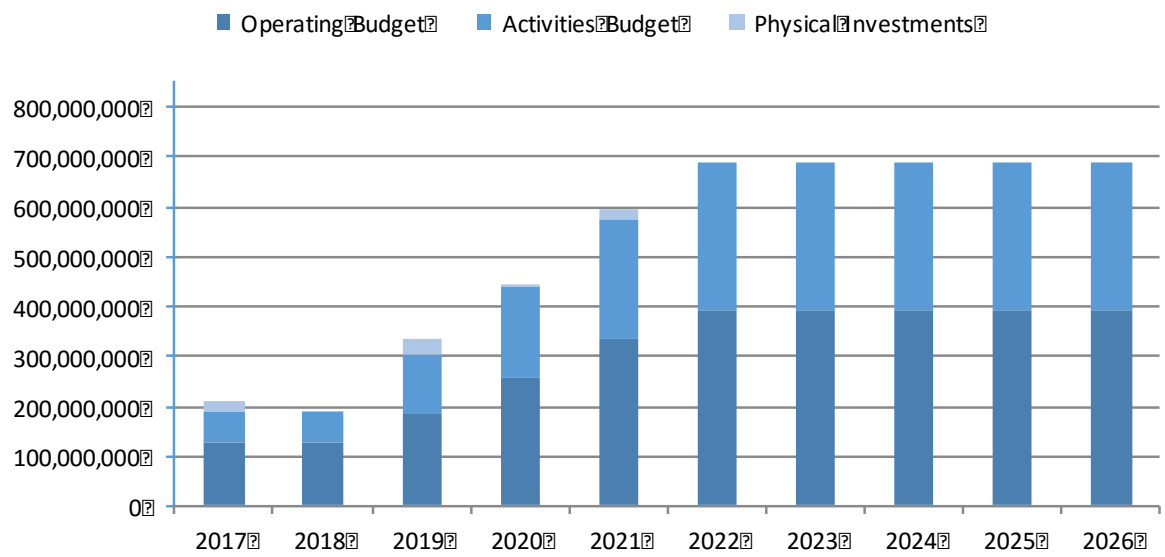
Element	Year 6+
Salaries and Benefits	241,914,000
Office Expenses	63,504,000
Vehicle Operating Costs	17,250,000
External Services	31,500,000
Functioning of National Focal Point Structures	2,333,000
Meetings and Missions	34,667,000
Operating Budget	**391,168,000**

Source: MBA Founding Texts, RebelGroup

The Intermediate Organizational Structure (Scenario 2) would imply the same level of investment in physical assets and activities as the Founding Texts Organizational Structure (Scenario 1).

The figure below illustrates operating costs during the two-year start-up period; the three-year transition period; and the long-term. It also illustrates the anticipated costs for activities and investments in physical assets. Although investments in physical assets are expected to be slightly lower under Scenario 2 than Scenario 1 (due to lower needs in terms of office furniture, etc.), the Intermediate Organizational Structure Scenario assumes the same level of investment in physical assets as the Founding Texts Organizational Structure to simplify the analysis.

Figure 6: Projected Funding Needs under Scenario 2



Source: RebelGroup

7.2.3 Cost Savings Compared to Scenario 1

The Intermediate Organizational Structure Scenario is expected to achieve long-term annual operating cost savings of approximately 21% compared to the Founding Texts Organizational Structure.

A comparison of the initial five-year operational funding needs suggests that the MBA will be able to achieve operating cost savings of approximately 19% under Scenario 2, as compared to Scenario 1. Furthermore, under the Intermediate Organizational Structure Scenario the long-term operating budget (from year 6 onwards) will be 21% lower than under the Founding Texts Organizational Structure Scenario. Irrespective of the MBA's funding sources (see Sections 8 and 9), reducing the overall costs will help reduce the budgetary impacts on the member states and/or users.

7.3 Scenario 3: Light Organizational Structure

7.3.1 Light Organizational Structure

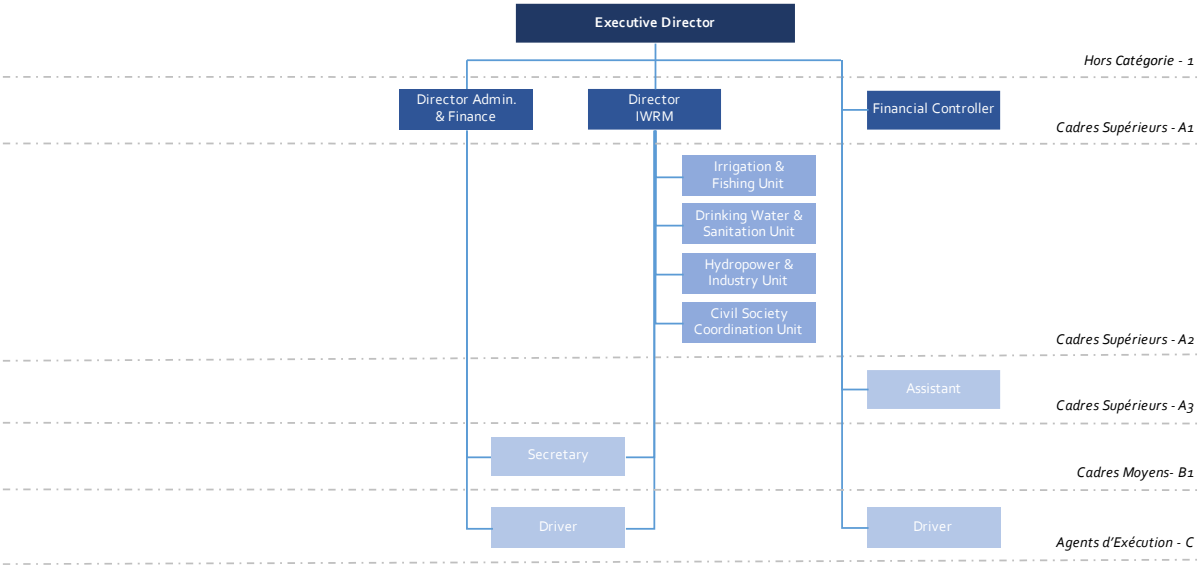
A long-term organizational structure with approximately 12 full-time staff would significantly reduce operating costs, reducing budgetary implications of the MBA member states.

A second alternative to the Founding Texts Organizational Structure is shown in the figure below. Under the Light Organizational Structure, the MBA would have approximately 12 full-time staff, including an executive director, 3 director level positions, and 8 other staff (5 *cadres supérieurs*, 1 *cadre moyen*, and 2 *agents d'exécution*). Key differences with the Intermediate Organizational Structure include:

- Merging the IWRM and operations director positions;
- Eliminating the basin observation unit, monitoring & evaluation unit, and finance & accounting unit; and
- Reducing the number of support staff from 5 to 4 people.

The proposed modifications would allow the MBA to further reduce the budgetary implication of the organizational structure. Scenario 3 would likely require shifting responsibilities to the remaining positions and units, as well as externalizing project management staff such that they would be covered by the project activities budgets funded through donors.

Figure 7: Light Organizational Structure (Scenario 3)



Source: RebelGroup

7.3.2 The Transition Period

During the first two years of operations, the Light Organization Structure would imply identical operating costs to those under the Founding Texts and Intermediate Operating Structures.

During the first two years of operations, the Light Organizational Structure would be identical to the earlier two scenarios (the Founding Texts Organizational Structure and the Intermediate Organizational Structure). Using the same basic cost assumptions, the table below shows the long-term annual operating budget under the Light Organizational Structure Scenario. A detailed overview of the above budget can be found in Annex VI.

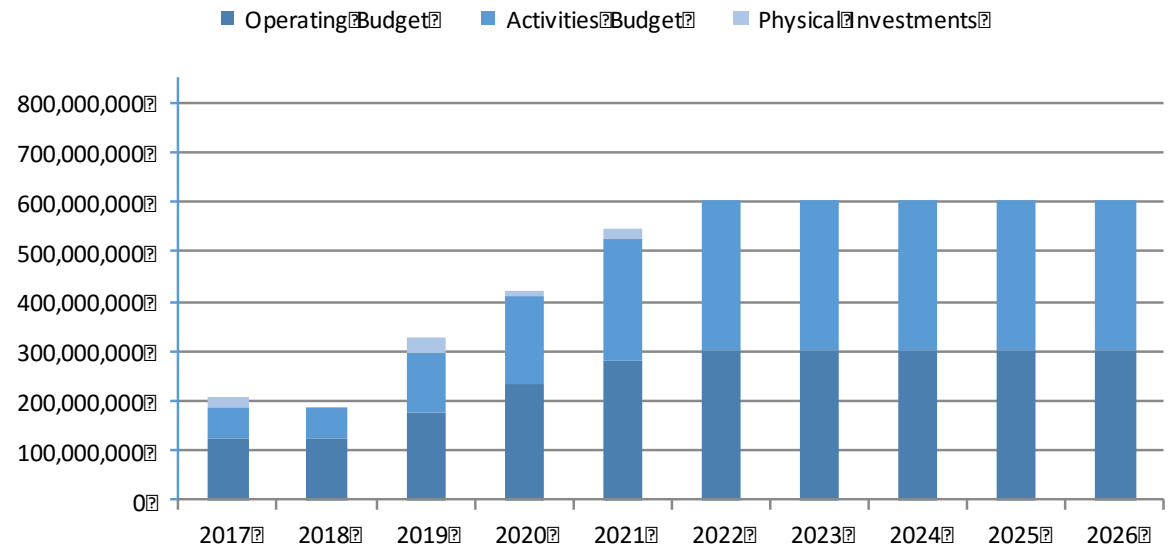
Table 10: Long-term Annual Operating Budget under Scenario 3

Element	Year 6+
Salaries and Benefits	178,213,000
Office Expenses	42,336,000
Vehicle Operating Costs	17,250,000
External Services	31,500,000
Functioning of National Focal Point Structures	2,333,000
Meetings and Missions	31,334,000
Operating Budget	**302,966,000**

Source: MBA Founding Texts, RebelGroup

The figure below illustrates the expected cash outflow during the two-year startup period, the three-year transition period, and the long-term operating period. The figure also shows anticipated costs related to investments in physical assets and activities related to the Strategic Action Plan.

Figure 8: Projected Funding Needs under Scenario 3



Source: RebelGroup

7.3.3 Cost Savings Compared to Scenario 1

A Light Organizational Structure is expected to achieve long-term annual cost savings of approximately 39% compared to the Founding Texts Organizational Structure.

Following the Light Organizational Structure is expected to achieve operating cost savings of approximately 26% during the first five years of operations and 39% over the long-term (starting in year six) compared to Scenario 1. The Light Organizational Structure therefore significantly limits the budgetary implications for the MBA member states and/or users.

7.4 Alternative Cost Saving Strategies

Alternative cost saving strategies may be applied to reduce operational costs in any of the three organizational structures described above.

Besides optimizing the MBA's organizational structure, there may be other ways to reduce the operating budget. This section will explore four potential other strategies to do so:

- Working groups;
- In-kind contributions;
- Staff secondments;
- Modified staff benefit packages; and
- Mergers with other RBOs.

The remainder of this section will discuss these alternative cost saving strategies.

7.4.1 Working Groups

Establishing working groups on substantive topics related to the Mono River basin would allow the MBA to keep operational costs low in the early years while still making progress towards its longer-term mandate.

One way to potentially reduce costs and achieve a lean organizational structure during the early years of the MBA while making progress on technical concerns is to consider establishing "working groups" or "expert groups." Working in conjunction with the Executive Director, Working Groups decentralize specific RBO work tasks towards the member states while, at the same time, increasing ownership from those same states. The MBA may, therefore, want to consider establishing Working Groups for various issues of key concern. These formally recognized internal Working Groups would enable the MBA to remain flexible in responding to challenges in the basin by setting up such groups to address key issues, but then also having the ability to dissolve them once the issue has been adequately addressed.

Establishing Working Groups keeps the administrative and financial burden low during the initial operating years. Typically, Working Groups would consist partially or fully of member state representatives with minimal strain on the MBA's operational budget. These representatives bring existing technical, human and financial capacity from their respective states and can help enhance the MBA's capabilities during the early years.

In the Statutes of the MBA, a Technical Expert Committee (*Comité Technique des Experts*) is proposed as one of the MBA's permanent governing bodies. This Committee includes seven representatives from both member states, representing the various sectorial ministries (agriculture, water resources, energy industry, etc.). Although the Technical Expert Committee's broad membership may not be sufficiently specialized to deal with specific technical problems, the Committee could help establish and staff Working Groups when there is a clear need that requires expertise and consultation on a specific topic. The Working Groups would then be dissolved once the specific technical issues have been resolved, hence reducing the need for a large executive directorate in the early years of the MBA's operations.

7.4.2 In-Kind Contributions

In-kind contributions by member states may also help reduce operational costs, particularly those related to office space, equipment, and hosting of events.

As discussed in Section 6.2, member state contributions can be both financial or in-kind. If member state contributions are in-kind, the MBA's operating budget can effectively be reduced. In-kind contributions may include:

- Office space;
- Hosting of meetings/events; and
- Equipment.

As mentioned earlier, it is not uncommon for a country hosting a RBO's headquarters to provide office space free of charge. The Convention specifies that the MBA's headquarters will be based in

Cotonou. Should the Government of Benin decide to provide office space to the MBA at no cost, this will help reduce the MBA's operating budget.

The MBA's operating costs may also be reduced if the member states agree to host certain key meetings and/or events. For example, rather than including a separate line item to cover the costs associated with the annual meeting of the Technical Expert Committee (*Comité Technique des Experts*), the member states could decide to host these meetings themselves, alternating between member countries. In particular, if the hosting member state were to use existing government facilities as opposed to rent commercial spaces, this could would not only directly reduce the MBA's operating budget but also result in lower overall costs to the member states.

Furthermore, member states could decide to provide surplus equipment (cars, computers, etc.) to the MBA to reduce upfront investment costs. Alternatively, member states could decide to share such equipment, although this could ultimately hamper the MBA's operations and reduce overall productivity.

Staff secondments, which could also be considered an in-kind contribution, will be discussed separately in the next section.

7.4.3 Staff Secondment

Staff secondments from member states would allow the MBA to make progress on its mandate while keeping staffing costs low, especially during the initial years.

Staff salaries represent a large share of the MBA's operating budget. One effective way to reduce the MBA's salary burden is to use staff secondments. Under a staff secondment program, member states would (temporarily) provide staff to work for the MBA, hence reducing the MBA's hiring needs and payroll. Throughout the secondment, the designated staff would remain civil servants and be paid directly by the respective member states. As the staff would presumably maintain a similar level of responsibilities compared to his/her previous position within the national administration, his/her base salary would remain at the same level. If appropriate, the MBA could compensate the seconded staff for any additional costs and/or provide an allowance above and beyond the base salary. In that case, the MBA would only be responsible for any incremental staff-related costs, with the member countries continuing to cover the base salary.

As aforementioned, the use of seconded staff could potentially lead to a high staff turnover, especially if the secondment term is relatively short. It would also limit the pool of potential candidates compared to a competitive recruitment process, meaning that the MBA may find itself in a situation in which the staff's background and experience may not fully match the required staff profile.

7.4.4 Modified Staff Benefit Package

Although a reduced staff benefit package could help keep operational costs low, it would likely impact the MBA's ability to attract and retain qualified professionals.

Similar to the rationale behind staff secondment, a reduced staff benefit package could help lower the MBA's operating budget. Currently, the benefit package described in the MBA's Founding Texts is based on the VBA's staff compensation. Although the budgetary impact of a reduction in salaries could be substantial, stakeholders in both Benin and Togo noted that the MBA would struggle to attract qualified staff. In this context, reducing salaries substantially below what other RBOs are offering may not be feasible or desirable.

7.4.5 Merge with Other RBOs

Although it could create economies of scale, merging with other RBOs would create significant logistical challenges that would likely outweigh the benefits.

In order to create operational efficiencies and take advantage of economies of scale, some stakeholders suggested to combine the MBA with an existing transboundary river basin organization that has a somewhat similar membership, such as the VBA or the NBA. Merging with an existing RBO would potentially reduce the need for support staff and even professional staff. However, given that the VBA and NBA's membership does not fully overlap with the MBA's membership,[22] combining them would create challenges in terms of member state contributions as well as where to headquarter the combined river basin authority.[23] With the above in mind, it appears that merging the MBA with an existing RBO may not be an attractive solution from an operating perspective.

7.4.6 Concluding Remarks on Alternative Cost Saving Strategies

Although the above strategies could help substantially reduce the MBA's overall operating budget, the remainder of the Study assumes that none of these alternative cost saving strategies are pursued. Should the member states decide that the MBA's budgetary implications are too high, they could revisit these strategies to reduce the overall operating costs.

[22] VBA's membership: Benin, Burkina Faso, Côte d'Ivoire, Ghana, Mali, Togo. NBA's membership: Benin, Burkina Faso, Cameroon, Chad, Côte d'Ivoire, Guinea, Mali, Niger and Nigeria.

[23] VBA is headquartered in Ouagadougou, Burkina Faso whereas the NBA is headquartered in Niamey, Niger.

8 Proposed Short-Term Financing Approach

Based on the analysis of possible financing mechanisms in Section 6 and the evaluation of the MBA's funding needs in Section 7, this section will discuss a proposed short-term financing mechanism. In the context of this analysis, short-term refers to the first two years of the MBA's operation. If the MBA were to become operational at the beginning of 2017, the short-term financing mechanisms would apply to the years 2017 and 2018. Section 9 will discuss the proposed medium- and long-term financing mechanism, which cover the period from 2019 onwards.

As discussed in Section 6.12, the following financing mechanisms could potentially apply to the MBA:

- Member state contributions (financial or in-kind);
- Dedicated tax;
- User fee-based financing, potentially coupled with polluter fee-based financing;
- Management & administration fees; and
- Donor contributions (for specific activities and/or investments).

However, some of these mechanisms require substantial preparations and would therefore not be available in the short-term. More specifically, dedicated tax, user fee-based, and polluter fee-based financing mechanisms would take several years before they can be effectively implemented. As a result, these financing mechanisms cannot be used to fund the MBA's operations in the short-run.

Management and administration fees apply to donor-funded activities that are implemented by the MBA. Such fees require the explicit consent of donors, which can only be obtained after substantial consultation with potential financial and technical partners. As the MBA is still in the process of being set up, it appears unlikely that management and administration fees would be available over the next two years. This leaves the MBA with effectively two short-term financing mechanisms:

- Member state contributions;
- Donor contributions.

As explained earlier, donors typically expect an RBO's operating budget to be secured through other funding sources such that donor funding can be applied to investments and/or activities. In this context, the MBA's short-term operating costs would need to be covered by the two member states whereas donor contributions could be used to acquire equipment, undertake investments and/or fund activities related to the MBA's Strategic Action Plan.

8.1 Short-Term Operating Budget Financing Approach

Both an analysis of best practices and stakeholder consultations support a short-term operating budget financed directly through member state contributions.

Based on the above considerations, the MBA's short-term operating budget will need to be funded through member state contributions. This conclusion has also been supported by consultations with stakeholders in Benin and Togo. Stakeholders confirmed that operating costs should be funded

through direct member state contributions until the MBA is able to demonstrate its role and potentially diversify its funding sources.

Assuming that the member states will not rely on in-kind contributions to reduce the MBA's budget, the entirety of the operating budget will need to be covered by Benin and Togo's monetary contributions. Although three different funding need scenarios were developed in Section 7, the short-term funding needs were based on the same startup organizational structure for the first two years (only an Executive Director with support staff). As a result, the short-term financing strategy will be the same for all three scenarios. Using the cost sharing mechanism outlined in Section 5.6, the table below shows how the annual operating costs during the first two years are expected to be shared between Benin and Togo.

Table 11: Short-Term Annual Operating Cost Sharing (Year 1 & 2 Combined)

Element	Total	Benin (38.9%)	Togo (61.1%)
Salaries and Benefits	110,040,000	42,806,000	67,234,000
Office Expenses	42,336,000	16,469,000	25,867,000
Vehicle Operating Costs	11,500,000	4,474,000	7,027,000
External Services	12,600,000	4,901,000	7,699,000
Functioning of National Focal Point Structures	4,666,000	1,815,000	2,851,000
Meetings and Missions	73,334,000	28,527,000	44,807,000
Operating Budget	**254,476,000**	**98,991,000**	**155,485,000**

Source: RebelGroup

Based on the above, the total operating cost incurred by Benin and Togo over the first two years of operations would be 99 million CFA and 155 million CFA, respectively. This excludes both the costs associated with implementing the Strategic Action Plan as well as investments in physical assets that are required to establish the MBA, which will be discussed in the section below.

8.2 Short-Term Investment & Activities Budget Financing Approach

This Study assumes that financial and technical partners may contribute up to 80% of the investment and activities budget, with the remainder to be covered by member state contributions in the short-term.

The short-term financing approach also needs to consider how investments and activities will be funded. Based on the role of donors in other RBOs around the world, it is likely that financial and technical partners such as World Bank, European Union, GIZ, etc. could contribute substantially to the MBA's investment budget as well as to the costs associated with implementing the short-term actions of the Strategic Action Plan. Indeed, most of the investment and activities budgets of RBOs such as CICOS and the Mekong River Commission have been traditionally supported by external donors. In the case of CICOS, financial and technical partners have provided some €20M in support over the 2006-2016 period (on average €1.84M per year). For the Mekong River Commission, donors committed some $100M for the 2011-2015 period. In both cases, member countries provided financial support to the operating budget but mostly only in-kind support to the investment and

activities budgets. Based on the above, it is conservatively assumed that donors would be willing to fund at least 80% of the investment and activities budget. For this assumption to be realized, it is critical that donors be involved in decision-making on the activities and investments proposed in the Strategic Action Plan and the associated budget implications.

Using the cost estimates for the implementation of the Strategic Action Plan (see Section 7.1),[24] the cost sharing mechanism outlined in Section 5.6 and assuming that donors would be willing to contribute 80% of the investment and activities budget, the table below shows how the investment costs during the first two years are expected to be shared between Benin and Togo.

Table 12: Short-Term Investment & Activities Cost Sharing (Year 1 & 2 Combined)

Element	Total	Donor	Benin (38.9%)	Togo (61.1%)
Activities Budget	120,000,000	96,000,000	9,336,000	14,664,000
Physical Investments	22,872,000	18,298,000	1,779,000	2,795,000
Total	**142,872,000**	**114,298,000**	**11,115,000**	**17,459,000**

Source: RebelGroup

8.3 Overall Short-Term Financing Approach

Combining the operating, investment, and activities budgets, the table below shows how the costs are shared between Benin, Togo, and technical and financial partners.

Table 13: Overall Short-Term Cost Sharing (Year 1 & 2 Combined)

Element	Total	Donors	Benin (38.9%)	Togo (61.1%)
Operating Budget	254,476,000	-	98,991,000	155,485,000
Activities Budget	120,000,000	96,000,000	9,336,000	14,664,000
Physical Investments	22,872,000	18,298,000	1,779,000	2,795,000
Operating Budget	**397,348,000**	**114,298,000**	**110,106,000**	**172,944,000**

Source: RebelGroup

With a light start-up organizational structure, Benin and Togo would be expected to contribute a total of 283 million CFA during the first two years to support the MBA's operations.

Assuming a light startup organizational structure—with only an Executive Director, support staff, and some 143 million CFA in activities and investments in physical assets during the first two years of operations—Benin's and Togo's total contribution would need to be 110 million CFA and 173 million CFA, respectively. A balance of 114 million CFA would be comprised of donor contributions, which are used to fund 80% of the activities and physical investments.

[24] Note: As mentioned earlier, the figures for the implementation of the Strategic Action Plan are proxy numbers that may be updated as more detailed information becomes available once the Strategic Action Plan is finalized.

9 Proposed Medium- and Long-Term Financing Approach

After the initial two years of operations, this Study assumes that the MBA transition to its long-term operating structure over a period of three years, as described in Section 7. This section will describe various financing mechanisms for both the medium-term (the three-year transition period) and the long-term (beyond year 6).

This section continues to assume that the MBA starts operations at the beginning of 2017. The short-term financing mechanisms discussed in Section 8 therefore apply to 2017 and 2018 (the two-year start-up period). The medium-term financing mechanisms described here apply to the years 2019, 2020, and 2021 (the transition period). The long-term financing mechanisms apply starting in 2022.

The amount of funding that the medium-term financing mechanisms would need to generate will ultimately depend on the organizational structure that the MBA decides to retain. Following the same approach as in Section 8, the following financing mechanisms could be used to fund the MBA's medium-term operating budget:

- Member state contributions (financial or in-kind);
- Dedicated tax;
- User fee-based financing, potentially in combination with polluter fee-based financing in the long-term;
- Management & administration fees; and
- Donor contributions (for specific activities and/or investments).

Unlike the short-term financing mechanism considerations discussed earlier, each of these financing mechanisms would be potentially feasible as a medium- or long-term financing solution—provided that the MBA is sufficiently well-prepared for their implementation and institutionalization. Although a dedicated tax or user fee/polluter fee-based financing mechanism would likely require several years of careful consultation and preparations, implementing it within the proposed five-year time frame could be feasible.

Based on the analysis of financing mechanisms in Section 6 and the funding needs assessment in Section 7, the remainder of this section will describe three potential medium-term financing strategies:

1. **Continuation of short-term financing:** Use of member state and donor contributions, potentially augmented with management & administration fees in the medium term.
2. **Transition to user fee/polluter fee-based financing:** Replace member state contributions over time with a user fee/polluter fee-based financing mechanism while maintaining donor contributions and potentially adding management & administration fees in the medium term.
3. **Transition to regional tax financing:** Replace member state contributions over time with a regional tax financing mechanism while maintaining donor contributions and potentially adding management & administration fees in the medium term.

The following three sections will describe each of these medium- to long-term financing strategies in detail.

9.1 Medium- & Long-Term Strategy 1: Continuation of Short-Term Financing

Although relying on direct member state contributions in the medium-term is the simplest financing strategy, it may place an undue burden on member states' budgets.

The simplest medium- and long-term financing strategy is to continue the short-term financing strategy. In this case, the member states would continue to jointly pay for the operating budget as well as for a relatively small share (20%) of the investment/activity budget. These costs would be shared using the same mechanism as for the short-term financing mechanism (see Section 5.6 for more detail). Furthermore, it is assumed that donors would continue to fund the remaining 80% of the investment/activity budget. Donors may also agree to applying management & administration fees on their contribution in the medium term, hence effectively subsidizing the MBA's operating budget which could potentially reduce the required member state contribution. In the long term, it appears unlikely that donors would agree to paying management & administration fees; instead requiring that the MBA's operating costs be covered through other financing mechanisms. The resulting cost allocation for the three different scenarios discussed in Section 7 is shown in the table below, assuming no management & administration fees are applied to donor contributions.

Table 14: Medium-Term Cost Allocation (Year 3-5) under Continuation of Short-Term Strategy

Item	Scenario 1: Founding Texts Organizational Structure	Scenario 2: Intermediate Organizational Structure	Scenario 3: Light Organizational Structure
Benin	442,999,000	347,840,000	315,808,000
Togo	695,816,000	546,350,000	496,037,000
Donors	481,190,000	481,190,000	481,190,000
Total	**1,620,005,000**	**1,375,380,000**	**1,293,035,000**

Source: RebelGroup

From year 6 onwards, the complete organizational structure contemplated under scenarios 1, 2, and 3 would be in place. The table below shows the overall long-term cost allocation for each scenario.

Table 15: Annual Long-Term Cost Allocation under Continuation of Short-Term Strategy

Item	Scenario 1: Founding Texts Organizational Structure	Scenario 2: Intermediate Organizational Structure	Scenario 3: Light Organizational Structure
Benin	216,116,000	175,504,000	141,194,000
Togo	339,452,000	275,664,000	221,772,000
Donors	240,000,000	240,000,000	240,000,000
Total	**795,568,000**	**691,168,000**	**602,966,000**

Source: RebelGroup

As can be seen from the above, even under the Light Organizational Structure (Scenario 3) the medium- and long-term budgetary impact on the two member states remains substantial.

The next two sections discuss two financing strategies that help reduce the impact on the member states' budget.

9.2 Medium- & Long-Term Strategy 2: Transition to User Fee-Based Financing

9.2.1 User Fee-Based Financing Applied to the MBA

Phasing out member state contributions and transitioning to a user fee-based financing mechanism can be an effective strategy as long as users have both the willingness and ability to pay and the MBA is able to show its economic value.

An alternative financing strategy is to phase out the member state contributions and transition to a user fee-based financing mechanism. As discussed earlier, this financing approach reflects the concept that water has an economic value and should be recognized as an economic good, as enshrined in both member states' water laws. For this mechanism to work as intended, however, it is important to acknowledge that certain user groups have greater capacity to pay than others. Subsistence farmers, for example, may struggle to contribute financially to the operations of the MBA. Furthermore, collecting contributions from thousands, or even hundreds of thousands of small water users would be challenging. In this context, it would be preferable to target large-scale water users such as hydropower and mining/industrial operators who also have the capacity to pay. Given the risk of a political backlash to user fee-based financing, implementing such a financing mechanism requires substantial consultation with users and the establishment and implementation of a clear and effective communication strategy.

When discussing the potential for user fee-based financing, stakeholders in both Benin and Togo noted that the publicly-owned Communauté Electrique du Bénin (CEB) could provide substantial financial support to the MBA. As an bilateral organization co-owned by the governments of Benin and Togo, the CEB is widely seen to be a successful example of transboundary river basin collaboration between Benin and Togo. The CEB operates the 65.6 MW Nangbeto Dam, which is situated in the Mono River basin. As a result, the CEB derives substantial economic benefit from its operations within the Mono River basin. Although the CEB may indeed be able to help fund a substantial part of the MBA's operating costs, there are three key considerations to be made:

1. **Electricity Costs:** Any financial contribution from the CEB to the MBA has the potential to increase the overall cost of electricity to CEB's end users in Benin and Togo, which in turn could result in popular discontent (see discussion on the impact of user fee-based financing on electricity tariffs below).
2. **MBA Neutrality:** Given the critical importance of the energy produced by the CEB to both member states while also being the source of some controversy regarding the prudent release of water resources, the CBE's potential role in the MBA's financing strategy should be carefully evaluated. More specifically, if the CEB's contribution is substantially larger than the contributions from other user groups, it may compromise the MBA's neutrality as it would depend too heavily on the CEB.
3. **Overlapping Roles:** As the CEB has historically fostered successful transboundary river basin collaboration between Benin and Togo, it could potentially perceive the creation of the MBA as a threat. It would therefore be beneficial to establish a formalized consultation mechanism between the two entities. Furthermore, as discussed earlier, the MBA should let the CEB lead any hydropower project development and focus its potential project development activities on other sectors.

A user fee-based financing strategy is more likely to be successful if multiple user groups contribute to the MBA's operating budget. Based on feedback from stakeholders in both Benin and Togo, a user fee-based financing mechanism could consider contributions from:

1. CEB;
2. Mining companies;
3. Other industries (e.g. cement producers);
4. Large-scale irrigated agriculture; and
5. Drinking water utilities.

A user fee-based financing mechanism could potentially be combined with polluter fee-based financing. As discussed earlier, the main challenges for polluter fee-based financing are identification of polluters, attaching a fair and realistic price to the pollution, and enforcement. In light of these challenges and in the interest of a timely operationalization of the MBA, the Study recommends not introducing a polluter fee-based mechanism until a user fee-based mechanism has demonstrated its effectiveness at generating revenues over a sustained period of time.

While charging multiple user groups may be attractive to avoid "overcharging" a single user group and potentially jeopardizing the MBA's neutrality, it also creates an additional administrative burden for the MBA to control, bill, and collect user fees from multiple user groups. Charging user fees to a single large water user or a small number of large water users would therefore be much simpler to implement. Limiting the number of paying users is particularly important during the MBA's early years. During this critical period, the Authority should focus on its strategic priorities and minimize its administrative burden. Over time, the MBA could pursue a more comprehensive user fee-based financing mechanism, charging fees to a broader user base, which could include both large and smaller water usages (e.g. irrigation, drinking water, fishing, navigation, etc.).

As discussed above, one of the large-scale users that could potentially support the MBA in the early years would be the publicly-owned CEB. The feasibility of the CEB contributing to the MBA should be further explored between the member states and CEB and is discussed in Section 9.2.2 below.

9.2.2 User Fee Financing Approach and Potential Revenues

Stakeholder consultation and order-of-magnitude estimates suggests that the Mono River basin is likely to have sufficient economic activity to support user fee-based financing.

To confirm that user fee-based financing is a viable medium- to long-term strategy for the MBA, the Team carried out consultations with stakeholders during its field missions and developed order-of-magnitude calculations for potential user fee revenues.

In the simplest user fee-based financing scheme, the MBA would rely only on the CEB to cover its operating budget. Although a user fee-based financing strategy is more likely to be successful if multiple user groups contribute, this approach can be used as a worst-case scenario. This section subsequently provides order-of-magnitude estimates should the MBA charge the CEB and large-scale water users (mining companies and other industrial users). If the MBA can raise sufficient revenues from a limited number of large water users, it can reasonably be assumed that broadening

the fee-paying user base would allow the MBA to raise additional revenues, provided that the fees outweigh the incremental transaction costs of charging those new (small-scale) users.

9.2.2.1 Hydropower-Only Approach

Charging hydropower to support the MBA's operating budget is arguably in line with the principles underpinning IWRM, and also ensures that the charges imposed are transferred to the users that benefit from the electricity produced.

Global research shows that hydropower projects have numerous and substantial impacts on their surroundings, including: changes in flow, sudden water release and potentially flooding, loss of cultivatable land, loss of habitat, disruption (during operations and construction, including displacement of people), etc.[25] In addition, if the MBA can collect and provide additional hydrological data to the CEB and/or reduce erosion over time, the CEB's hydropower plants may be able to operate somewhat more efficiently and thus generate more revenues or reduce costs.

Only charging hydropower (as opposed to charging multiple water usages) may in fact be in line with principles of equity, as many individuals and companies in Benin and Togo use at least some electricity produced by the CEB. To the extent that the charges imposed on the CEB are transferred to electricity end users, this simple user fee-based financing scheme would imply that many of the individuals and companies benefitting from the Mono River basin would also contribute to the MBA's operating costs. Although the charges imposed on the CEB could theoretically be based on installed capacity (expressed in MW), it may be more sensible to link the charges to electricity produced (expressed in kWh or GWh), as this is directly related to the amount of water mobilized for hydropower generation and better captures benefits to end users.

Assuming that the CEB would be required to fund the MBA's entire operating budget of about 500 million CFA (Scenario 1, year 6 onwards), this would lead to an increase of about 3 CFA/kWh in the cost of electricity based on the annual production of the 65.6 MW Nangbeto Dam.[26] Once the 147 MW Adjarala Dam begins operations, the increase in the cost of electricity would be reduced to less than 1 CFA/kWh.[27] This is a relatively modest increase of about 0.6-1.2%, compared to current electricity rates ranging from 63 CFA/kWh to 120 CFA/kWh in Togo[28], with electricity users in Benin facing similar rates. Applying the same approach to the three budget scenarios developed in Section 7 yields the electricity tariff increases in the table below.

[25] http://fwee.org/environment/how-a-hydroelectric-project-can-affect-a-river/how-a-hydro-project-affects-a-river-print/

[26] Using an annual electricity production of 172 GWh for the Nangbeto Dam.

[27] Using an annual electricity production of 366 GWh for the Adjarala Dam, for a combined annual production of 538 GWh (Nangbeto Dam + Adjarala Dam).

[28] West Africa Policy Note, AfDB, September 2015, page 24

Table 16: User Fees Applied to Hydropower Only

Budget scenario	Budget Year 6+	Electricity Tariff Increase[29]
Scenario 1	496 million FCFA	0.92 FCFA/kWh
Scenario 2	391 million FCFA	0.73 FCFA/kWh
Scenario 3	303 million FCFA	0.56 FCFA/kWh

Source: RebelGroup

9.2.2.2 Hydropower and other Industrial Water Users Approach

To spread the MBA's operating budget over multiple water users, the MBA could charge user fees to other industrial water users, in addition to charging the CEB.

A number of mining companies operate in the Mono River basin, ranging from small-scale artisanal operators to large-scale international corporations that exploit resources including phosphate, manganese, and marble. Mining companies could be asked to contribute a user fee to the MBA's operating budget based on the water resources that they mobilize for their operations.

The MBA could further expand user fees to other industrial user groups, to the extent that such industries operate within the Mono River basin. Although there are some cement producers in the region, these appear to be located outside the Mono catchment area.

Given the impact mining and other industries can have on the environment and water quality, user fees could potentially be combined with penalties for (water) pollution. Such an approach could also help justify differentiated charges between different users. Indeed, water withdrawn and subsequently released for hydropower electricity production may have a less negative impact than water consumed in a polluting industrial or mining process, and could therefore potentially benefit from a lower user charge per quantum of water withdrawn.

Assuming that hydropower and mining/industrial water usages will each contribute 50% of the MBA's operating budget, the impact on the cost of electricity would be reduced to less than 0.50 CFA/kWh after the completion of the Adjarala Dam. Furthermore, assuming 10 large mining/industrial sites exist in the Mono River basin, each would on average need to contribute 25 million CFA for a total of 250 million CFA (remaining 50% of the MBA's operating budget). For a large international mining or industrial operation, an annual water user fee of 25 million CFA (about €38k) would not appear to be excessive, assuming that the MBA is able to demonstrate its utility to these paying water users through, for example, better data on water resource availability. In practice, each mining company or industrial operation's charge would of course depend on the amount of water withdrawn and on the environmental impact of its operations.

To operationalize this strategy, the MBA would need to undertake a detailed assessment of water usage for each mining or industrial facility in the Mono River basin. Indeed, this is one of the recommended activities to be undertaken by the MBA to establish a user fee-based financing mechanism (see Section 9.2.3). Should the MBA decide to also implement a polluter-fee based mechanism in the long-term, a similar detailed assessment focusing on each mining or industrial

[29] Using the combined annual electricity production of Nangbeto Dam and Adjarala Dam (538 GWh).

facility's impact on the environment would need to be undertaken. The table below summarizes the outlined approach of splitting the user fees between hydropower and mining.

Table 17: User Fees Applied to Hydropower (50%) and Mining (50%)

Budget scenario	Budget Year 6+	50% CEB: Electricity Tariff Increase[29]	50% Mining/Industry: Mining/Industrial Charge[30]
Scenario 1	496 million FCFA	0.46 FCFA/kWh	25 million FCFA/mine
Scenario 2	391 million FCFA	0.36 FCFA/kWh	20 million FCFA/mine
Scenario 3	303 million FCFA	0.28 FCFA/kWh	15 million FCFA/mine

Source: RebelGroup

As can be seen from the table above, the hydropower and mining/industrial user fees required to support the MBA's operating budget are relatively modest, reducing the likelihood of political challenges to implementing this financing mechanism.

Beyond industrial uses, the MBA could also consider charging other usages, such as agriculture, fishing, and drinking water. However, as these uses tend to be less profitable and many more parties may be involved, it would be significantly more difficult (and expensive) to collect such user fees.

If the MBA decides to implement a user fee financing mechanism and no longer depend on member state contributions, the cost sharing arrangement discussed in Section 5.6 will likely no longer apply. Indeed, the user fees and potential pollution fees/penalties in combination with the type/number of users and polluters in each country would determine their effective contribution.

In the medium-term, the MBA should charge user fees only to large water users, such as hydropower, mining, and industry. Over time, the MBA could expand user fees to smaller-scale users if deemed economically viable.

In the medium-term, the Study recommends that the MBA focus on a limited number of large water users to fund its operating budget. Hydropower and mining/industry appear to be the most promising sectors. As part of its initial tasks, the MBA should carry out an assessment to re-confirm the most relevant and promising large water users to be charged. Targeting large-scale users in the medium-term would allow the MBA to focus on its strategic priorities while avoiding the high transaction costs and administrative burden associated with collecting revenues from a large number of users.

In the long-term, the MBA could potentially expand its user fees to other water usages, including agriculture, fishing, navigation, and drinking water. Doing so would require detailed information on each water usage, including the number of users and how much water they use. However, as aforementioned, the success of expanding user fees to a larger number of users will also depend on the users' capacity to pay. Should the MBA decided to also implement a polluter fee-based financing

[30] The calculated hypothetical charge per mine or per industrial site is based the assumption that there are 10 mines or industrial operations in the Mono River basin that will all contribute evenly to the MBA. In reality, the charge per mine or industrial site will depend on the amount of water used and/or the operation's environmental impact on the basin.

mechanism, additional data on pollution-generating activities would need to be gathered and analyzed.

9.2.3 Steps Required to Establish a User Fee-Based Financing Mechanism

Establishing a user fee-based financing mechanism requires significant preparation, consultation with member states, users and other stakeholders, and time.

User fee-based financing requires substantial preparation and implementation time. In addition, a user fee-based financing strategy can only be successful if the MBA can clearly demonstrate its value to the various user groups—particularly those expected to contribute financially to the MBA's operating costs. The MBA could, for example, provide improved hydrological data and/or river flow forecasts that may lead to higher productivity (hydropower), reducing erosion, providing flood alerts, etc.

To establish a user fee-based financing mechanism, the MBA will need to undertake the following steps:

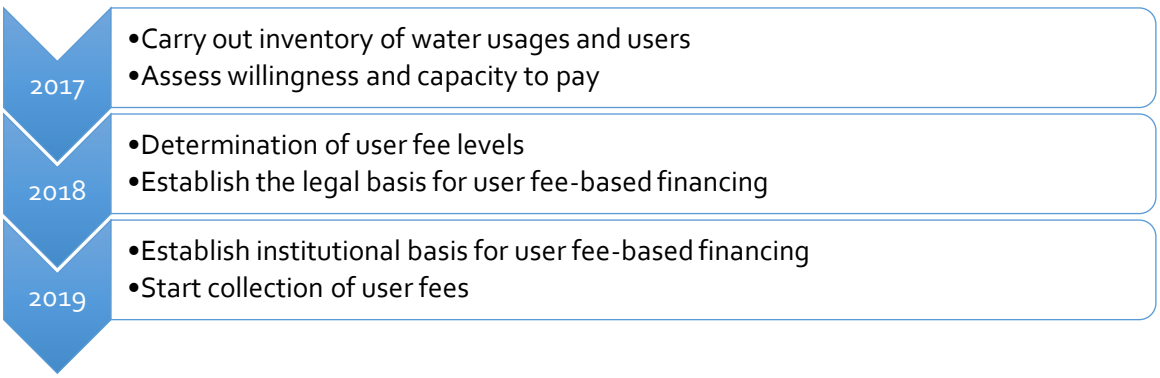
- **Undertake an inventory of water usages and users:** Through an extensive inventory, the MBA must first identify the different water usages and users in the Mono River basin. Following the approach outlined above, it should initially focus on the CEB's hydropower projects as well as large mining and industrial activities. After identifying these large water users, the study can broaden its scope to include all water usages, including large-scale irrigation, fishing, subsistence farming, drinking water, etc. If the MBA decides to combine a user fee-based financing mechanism with a polluter fee-based financing mechanism, the inventory should also identify the types of (water) pollution that occur within the basin. This inventory could be one of the first activities to be carried out by the MBA, as it will not only help identify potential contributors to the MBA's operating budget but also improve knowledge of the uses of water resources within the Mono River basin and the potential sources of pollution. Donors could play a critical role in the MBA's establishment by funding such a study. Assuming the MBA is operationalized in early 2017, this study could be carried out in the first half of 2017.
- **Assess willingness and capacity to pay:** After identifying the different water usages and users in the basin, the MBA should confirm the targeted users' willingness and capacity to pay. This activity requires consultation with stakeholders as the willingness to pay depends on stakeholders' understanding of the MBA's role and responsibilities. The MBA must also effectively convince future user fee payers of the MBA's added value. Given its focus on large commercial water users, this activity also requires building consensus among decision makers regarding the need for user fees to support the MBA's operating budget. The MBA can begin assessing willingness and capacity to pay after the inventory of water usages and users has been completed, presumably in the second half of 2017.
- **Determine user fees:** Based on the inventory of water usages and users and the assessment of users' willingness and capacity to pay, the MBA can determine the user fees (and potentially polluter fees) that will be charged. The fees will need to be a function of the amount of water withdrawn and potentially the environmental impact of the users' activities. The aggregate user fees should, after an adjustment for anticipated non-collections, be

sufficient to cover the MBA's operating costs. The determination of user fee levels can be initiated after the assessment of users' willingness and capacity to pay, likely in early 2018.

- **Establish the legal basis:** In parallel to determining user fee levels, the MBA must establish the legal basis for a user fee-based financing mechanism. Both Benin and Togo's water laws anticipate the use of user fees and polluter fees. The MBA will need to work with law makers and relevant ministries to draft the necessary decrees that detail how the user fees and polluter fees will be applied in practice. Furthermore, the MBA will need to determine whether and how to use the two national water management funds in the context of the proposed user fee-based financing mechanism.
- **Establish the institutional basis:** After establishing the legal basis for a user fee-based financing mechanism, the MBA will need to establish its institutional basis. More specifically, the MBA will need to determine who will collect and manage user fee revenues at the national level. In case the MBA only charges user fees to a limited number of large-scale water users, the MBA may be able to collect these fees directly. However, if the MBA decides to apply user fees to smaller water users (such as farmers), collection agencies may be required, including subsidiaries at the local level. Furthermore, an effective control system such as a "water police" must be put into place to ensure that users comply with the proposed financing mechanism. Fines or penalties should be sized in such a way to provide a strong incentive to pay user fees or pollution fees in full and on time. Ideally, each member state would be responsible for verifying compliance to avoid additional pressure on the MBA's organizational structure, with revenues from fines flowing to the MBA (to the extent that they do not exceed the originally anticipated revenues).
- **Start collecting user fees:** Once the user fees, legal basis, and institutional basis have been established, the MBA can begin collecting user fees. Assuming the MBA is operationalized in early 2017 and the various steps described above can be carried out as per the schedule proposed, the MBA could start collecting user fees during 2019. The expected gradual ramp up of user fees is described in the next section.

The steps to be undertaken by the MBA are visualized in the figure below.

Figure 9: Implementation Steps for User Fee-Based Financing Mechanism



Source: RebelGroup

If the MBA decides to also implement a polluter fee-based financing mechanism in the long-term, a similar set of activities would need to be undertaken. These activities would only need to be initiated after the user fee-based financing mechanism has demonstrated its effectiveness beyond 2019.

9.2.4 User Fee Revenue Ramp Up

User fees are not expected to be fully available from the first year collection starts as establishing a new financing mechanism takes time. Furthermore, it may be attractive to propose gradually increasing fees to make paying such fees more palatable to users.

The table below proposes a shift over time from member state support to user fee-based financing. The cost allocation applies to the budget previously funded by the member states (all operating costs and an assumed 20% of the investment/activity budget) whereas the remainder of the investment/activity budget is assumed to be funded by donors. Should the MBA struggle to deliver concrete value to the various user groups, the shift to user fee-based financing may need to be delayed.

Table 18: Temporal Shift from Member State Contributions to User Fee-Based Financing

Year	Member state contributions share	User fee-based financing share
Year 1 (2017)	100%	0%
Year 2 (2018)	100%	0%
Year 3 (2019)	80%	20%
Year 4 (2020)	60%	40%
Year 5 (2021)	30%	70%
Year 6+ (2022+)	0%	100%

Source: RebelGroup

Applying the above outlined temporal shift leads to the following medium-term cost allocation under the three scenarios outlined in Section 7.

Table 19: Medium-Term Cost Allocation (Year 3-5) under Transition to User Fee-Based Financing

Item	Scenario 1: Founding Texts Organizational Structure	Scenario 2: Intermediate Organizational Structure	Scenario 3: Light Organizational Structure
Benin	230,165,000	180,321,000	166,534,000
Togo	361,519,000	283,229,000	261,574,000
User fees	547,132,000	430,640,000	383,737,000
Donors	481,190,000	481,190,000	481,190,000
Total	**1,620,006,000**	**1,375,380,000**	**1,293,035,000**

Source: RebelGroup

From year 6 onwards, the full organizational structure contemplated under scenarios 1, 2 and 3 would be in place and supported by user fees. The table below shows the overall long-term cost allocation with user fee-based financing, assuming that donors continue to fund 80% of the investment/activity budget.

Table 20: Annual Long-Term Cost Allocation under Transition to User Fee-Based Financing

Item	Scenario 1: Founding Texts Organizational Structure	Scenario 2: Intermediate Organizational Structure	Scenario 3: Light Organizational Structure
Benin	-	-	-
Togo	-	-	-
User fees	555,568,000	451,168,000	362,966,000
Donors	240,000,000	240,000,000	240,000,000
Total	**795,568,000**	**691,168,000**	**602,966,000**

Source: RebelGroup

Although user fee-based financing appears to be an attractive way to reduce the longer-term budgetary impact on the two member states and is in line with the existing legal framework for the water sector in Benin and Togo, its feasibility ultimately depends on 1) the MBA's ability to deliver value to its users; 2) users' ability to perceive such a value in monetary terms; and 3) users being willing and capable to financially support the MBA. A user fee-based financing strategy for the MBA would be a groundbreaking approach that, if successful, could potentially be replicated in other RBOs around the world.

9.3 Medium-Term Strategy 3: Transition to Regional Tax Financing

9.3.1 Regional Tax Financing Applied to the MBA

Establishing a community levy could be a highly stable and effective financing source, but should either be part of a wider regional strategy to support IWRM across multiple RBOs or be limited to a levy that applies to Benin and Togo only.

The third medium- and long-term financing strategy involves establishing a levy or tax to fund the MBA. An example for such financing is the CEMAC's *Taxe Communautaire d'Intégration* (TCI), as discussed in Textbox 6 of this report (refer to Section 6), which helps fund the CICOS. Compared to direct member state contributions, the TCI revenues are substantially more stable and reliable. A similar community levy could be established to fund the MBA. In the past, the VBA has proposed such an approach to ECOWAS, but with limited success. The NBA also proposed a community levy as part of its broader financing strategy. It is highly unlikely that ECOWAS or other regional organizations would entertain requests for funding from individual RBOs, as the community levy would apply to all the regional organization's member countries whereas only the members of the RBO requesting the financial support would benefit. Efforts by the MBA to request the establishment (or increase) of a community levy to fund its operations involving all member states of a regional organization are therefore unlikely to be successful unless accompanied by a wider regional RBO strategy. Alternatively, the MBA could choose to establish a levy that only involves Benin and Togo. Both approaches will be discussed below.

9.3.2 Regional Community Levy Approach and Potential Tax Rate

Leveraging an existing community levy for a regional organization such as ECOWAS or UEMOA to fund the MBA may be a viable option if it is pursued in close collaboration with other regional RBOs, who would also benefit from such a financing mechanism.

Benin and Togo are members of a number of regional organizations, including ECOWAS[31] and the smaller West African Economic and Monetary Union (UEMOA[32]). Both organizations have already established a community levy to fund their respective operations as well as community projects and programs, which currently exclude RBOs.

- ECOWAS: A community levy of 0.50% ("Prélèvement Communautaire") on imports from outside the ECOWAS region.
- UEMOA: A community levy of 1.00% ("Prélèvement Communautaire de Solidarité") on imports from outside the UEMOA region.

The MBA could partner with other RBOs within the ECOWAS or UEMOA region to request an increase of the existing community levy to (partially) fund the various RBOs operating within the regional organizations. Alternatively, the RBOs could collectively request to be funded directly from the levy's existing revenues, although this would reduce the remaining revenues available for ECOWAS or UEMOA's own operational costs.

Should all RBOs within the ECOWAS or UEMOA region jointly develop a proposal to (partially) fund the regional transboundary RBOs from a community levy on imports, the issue of membership and fair contribution discussed earlier may be reduced. In the case of ECOWAS[33], such a joint proposal could include some or all of the following RBOs present in the ECOWAS region:

- Senegal River Basin Development Organization (OMVS);
- Gambia River Basin Development Organization (OMVG);
- Volta Basin Authority (VBA);
- Niger Basin Authority (NBA);
- Mono Basin Authority (MBA);
- Mano River Union (MRU); and
- Lake Chad Basin Commission (LCBC).

If presented as a joint proposal, ECOWAS may be willing to reconsider the idea of (partially) funding RBOs as well as potentially other institutions within ECOWAS through its community levy. Indeed, in the case of CEMAC, an import levy of 1% generates tax revenues that are sufficient to not only support the CICOS but also a host of other institutions associated with the CEMAC. As IWRM can be an effective tool for regional integration (with the CEB being a relatively effective example),

[31] ECOWAS member states: Benin, Burkina Faso, Cape Verde, Ivory Coast, the Gambia, Ghana, Guinea, Guinea Bissau, Liberia, Mali, Niger, Nigeria, Senegal, Sierra Leone, and Togo.

[32] UEMOA member states: Benin, Burkina Faso, Ivory Coast, Guinea Bissau, Mali, Niger, Senegal, and Togo.

[33] Note: The approach for an increase in the UEMOA community levy would be very similar to that of ECOWAS as most of the RBOs listed have member states that belong to both ECOWAS and UEMOA. The remainder of this discussion will focus on ECOWAS' community levy but the same principles would apply to UEMOA's community levy.

ECOWAS could potentially justify further intensifying its involvement in this area. Under such scenario, ECOWAS could use its Water Resources Coordination Unit (WRCU) to oversee and channel funds from the import levy to the various RBOs in the ECOWAS region. In that case, the WRCU would not only assume a coordinating role but also help allocate critical financing to the RBOs.

If—as a proxy—all seven RBOs present in the ECOWAS region are assumed to request a similar level of annual funding as the MBA, a total annual budget of 3.5 billion CFA (7 RBOs x 500 million CFA, based on the MBA's long-term annual budget under Scenario 1 of approximately 500 million CFA) would be required. Although this is a substantial amount of funding, it would only represent a minor increase of about 0.006% in the ECOWAS community tax, assuming some $100 billion imports into the ECOWAS region.[34] Even after adjusting for non-collection, the additional tax rate would remain very low.

An objection that could be raised against this type of financing mechanism is that other public organizations working in different fields than IWRM do not currently benefit from such a financial support mechanism—and ECOWAS may be unwilling to set a precedent. Should ECOWAS at some point consider expanding its community levy to support RBOs in the region, it could also consider funding other organizations with similarly critical missions (e.g. combating deforestation). Again, the CEMAC may serve as an example, as it chose to finance a range of regional organizations associated to the CEMAC, including the CICOS.

As a medium- or long-term financing strategy, the above outlined approach can only be achieved if the MBA works together with other established RBOs to lobby for an increase in the existing community levy. This would require a substantial regional effort, in which ECOWAS' WRCU could potentially play an important role. Alternatively, the MBA could decide to pursue a tax-based financing strategy that only implicates Benin and Togo, as described below.

9.3.3 Bilateral Community Levy Approach and Potential Tax Rate

Setting up a new levy on trade between Benin and Togo to fund the MBA may be a relatively simple financing mechanism - but could negatively impact trade between the two countries.

To avoid the complications associated with a regional community levy funding multiple RBOs, the MBA could also consider creating a specific tax that only applies to Benin and Togo. One option could be to tax all trade flowing through the Mono River basin between Benin and Togo, or more broadly all trade between Benin and Togo.[35] An alternative could be to tax the movement of people between Benin and Togo. Taxing imports to fund the MBA's operating costs is more likely to be politically acceptable, however, than imposing a charge on people crossing the border.

[34] Source: https://knoema.com/WTOSD2015/wto-statistical-data-sets-1948-2015. Note: This figure will somewhat overstate the potential community levy revenues as only imports from outside the ECOWAS region are taxed. For the sake of simplicity, no adjustment for intra-ECOWAS trade is made in this order-of-magnitude tax estimate.

[35] Note: As the Mono River basin covers most of the border between Benin and Togo, it may be reasonable to assume that the difference between the two is quite limited.

In 2014, Benin imported $123 million in goods from Togo[36] whereas Togo imported $19 million from Benin.[37] In order to raise 500 million CFA to fund the MBA's long-term annual operation budget and assuming a recovery rate of 75%, the levy on the combined trade between Benin and Togo would need to be some 0.75%.

A drawback of such a bilateral community levy[38] is that it may discourage trade between Togo and Benin (or certainly goods flowing from Togo to Benin given the large import discrepancy between the two countries). This would be a rather disappointing outcome if one of the overall objectives of establishing the MBA is regional integration. Furthermore, the efforts and costs of setting up an entirely new single purpose import tax to raise a relatively modest amount of annual revenues are likely to make it a rather inefficient financing strategy with high transaction costs.

An alternative approach would be to have each country use some of its existing import or other tax revenues to fund the MBA. However, in practice, this would be the equivalent of continuing direct financial contributions (see Strategy 1 as discussed in Section 9.1) as it would simply shift revenues from other government commitments to the MBA. For this reason, this alternative will not be analyzed in any further detail.

9.3.4 Bilateral vs. Regional Community Levy

Given the advantages and disadvantages of bilateral and regional community levy financing, the Study recommends prioritizing efforts to increase an existing regional community levy over efforts to establish a new levy on trade between Benin and Togo.

As can be understood from the above, the two different community levies each have their advantages and disadvantages. Both approaches are expected to generate relatively stable revenues once they are in place, which probably make them more attractive than direct member state contributions that have often proven to be rather unpredictable.

The expansion of an existing regional community levy such as the ECOWAS' *Prélèvement Communautaire* or the UEMOA's *Prélèvement Communautaire de Solidarité* will require extensive regional collaboration with existing RBOs (and potentially other specialized regional public organizations) and persuasion of a large number of actors, but its implementation should be relatively straight forward as it effectively requires only a (minor) increase in the tax rate.

As for a bilateral community levy to be applied on trade between Benin and Togo, it should be easier to obtain a consensus as only the MBA and its two member states are involved. The actual creation of a new tax, however, will be much more complex, resulting in high transaction costs. Furthermore, such an import tax may have a negative impact on trade between Benin and Togo. Establishing a tax only for the MBA that may harm trade is expected to be politically challenging.

[36] Source: http://atlas.media.mit.edu/en/visualize/tree_map/hs92/import/ben/tgo/show/2014/

[37] Source: http://atlas.media.mit.edu/en/visualize/tree_map/hs92/import/tgo/ben/show/2014/

[38] In addition to the concern already raised on why only IWRM would benefit from such a tax whereas there may be a number of other public organizations that would keenly apply a similar approach to secure funding.

Although funding the MBA through an increase of an existing regional community levy is a highly ambitious political project that requires a strong commitment from a large number of states and organizations, it is likely to be more efficient than a single purpose import tax between Benin and Togo. As such, the Study recommends prioritizing efforts to increase an existing regional community levy over efforts to establish a new levy on trade between Benin and Togo.

As was the case for the user fee-based financing mechanism described earlier, the cost sharing arrangement discussed in Section 5.6 may no longer be applicable if the MBA decides to pursue a regional tax financing strategy to fund its operating budget.

9.3.5 Steps Required to Establish a Regional Tax Financing Mechanism

Establishing a regional tax financing mechanism requires significant preparation and consultation with other RBOs, member states, and regional organizations.

Establishing a regional tax financing mechanism such as outlined in Section 9.3.2 will require substantial preparation and time to implement. To adjust an existing community levy to fund the MBA and other RBOs in the region (as well as potentially other regional public organizations), it will need to undertake the following steps:

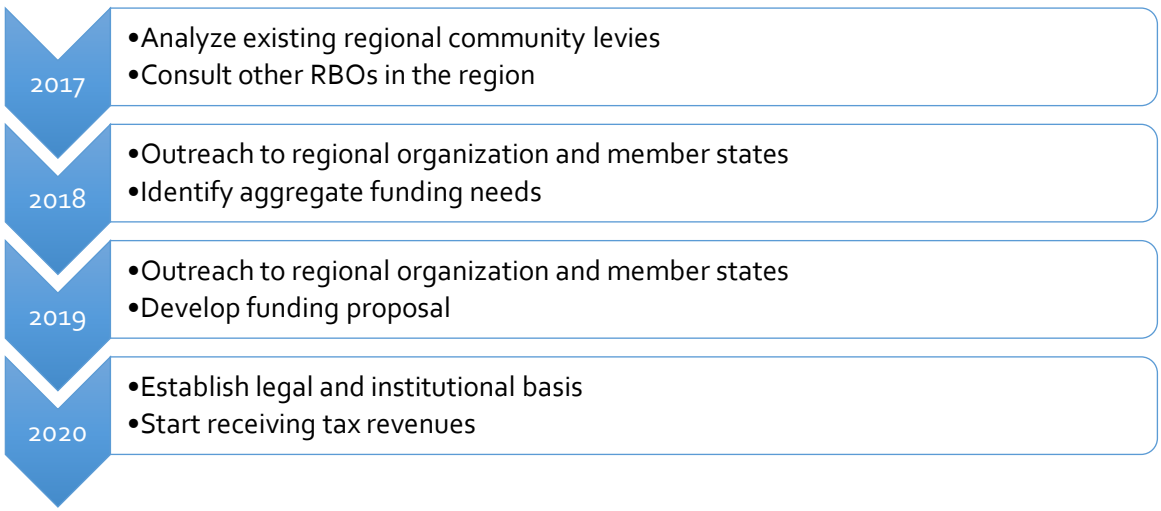
- **Analyze existing regional community levies:** The MBA must first analyze in detail the existing regional community levies from the various regional organizations, including the ECOWAS' *Prélèvement Communautaire* or the UEMOA's *Prélèvement Communautaire de Solidarité* as well as any other existing regional taxes. More specifically, the MBA should determine to what extent these levies work as intended, how much money they raise annually, and whether the member states transfer the tax revenues to the regional organization as agreed. Furthermore, the MBA will need to develop an understanding of the current use of the community levies' revenues and whether there may be capacity to fund RBOs under the existing tax rates. This information will help identify which community levy could financially support RBOs in the region. Assuming the MBA is operationalized in early 2017, this study could be carried out in the first half of 2017.
- **Consult other RBOs:** In parallel, it will be critical for the MBA to engage with other key RBOs in the region and explain the overall approach of leveraging an existing community levy to fund a range of RBOs (and potentially other regional public organizations). Which RBOs to associate with will depend on 1) the membership of each RBO and 2) the membership of the regional organization (e.g. ECOWAS or UEMOA) that will be asked to consider funding the RBOs.
- **Identify aggregate funding needs:** Together with the associated RBOs, the MBA will determine the approximate aggregate funding needs for the different RBOs to be include in the funding proposal. The aggregate funding needs should be adjusted for existing funding sources excluding direct member state contributions. The MBA can start this activity after analyzing the regional existing community levies and consulting other RBOs in the region, presumably in 2018.
- **Outreach to regional organization and member states:** Throughout the above and below steps, the MBA and associated RBOs will reach out to the considered regional organization(s)

and its member states to discuss the overall concept in order to obtain feedback that can be integrated into the funding proposal (see below) and work towards a consensus approach.

- **Develop funding proposal:** Based on the above, the MBA will work with the associated RBOs to develop a funding proposal to the regional organization(s) with the most promising community levy. This funding proposal will include the RBOs' estimated aggregate funding needs as well as the proposed increase in tax rate to cover these funding needs. It will also analyze what the economic impacts of such tax increase may be. Furthermore, the proposal will describe in detail how the flow of funds would work under the new arrangement. As mentioned earlier, should ECOWAS be willing to consider funding the MBA and other RBOs through its community levy, its WRCC could play a critical role in allocating the tax proceeds to the various RBOs. A funding proposal would not be expected before 2019 as the outreach activities are expected to take a substantial amount of time.
- **Establish legal and institutional basis:** Once a consensus is established, the MBA and the associated RBOs will work with the selected regional organization to update all legal texts associated with the existing community levy to ensure the legal basis of the proposed regional tax financing mechanism. Furthermore, the flow of funds will be formalized to create clarity on how tax revenues will flow to the RBOs. Establishing the legal and institutional basis can begin after the funding proposal has been accepted.
- **Start receiving tax revenues:** Once the legal and institutional basis have been established, the RBOs (including the MBA) can begin receiving tax revenues to support their operating budget.

The various steps to be undertaken by the MBA are visualized in the figure below.

Figure 10: Implementation Steps for Regional Tax Financing Mechanism



Source: RebelGroup

9.3.6 Regional Tax Financing User Fee Revenue Ramp Up

As is clear from the above, establishing a regional tax to support the MBA (and other RBOs) would require time. Such a process would be highly political, and the exact timing for implementation would therefore be uncertain. Once the tax has been established, however, this funding source could ramp up quickly. Based on the approximate timeline provided above, it could take at least four years before

tax collection can start. Assuming a quick ramp up, regional tax financing could fully replace member state contributions from year 6 onwards. Because the establishment of a regional tax-based financing mechanism for various RBOs is an ambitious political project, the shift to tax financing could be delayed beyond the timeframe projected below.

Table 21: Temporal Shift from Member State Contributions to Regional Tax Financing

Year	Member state contributions share	Regional tax financing share
Year 1 (2017)	100%	0%
Year 2 (2018)	100%	0%
Year 3 (2019)	100%	0%
Year 4 (2020)	100%	0%
Year 5 (2021)	50%	50%
Year 6+ (2022+)	0%	100%

Source: RebelGroup

Following the proposed timeline associated with the establishment and rollout of a regional tax, the table below shows the medium-term cost allocation for each of three scenarios outlined in Section 7.

Table 22: Medium-Term Cost Allocation (Year 3-5) under Transition to Regional Tax Financing

Item	Scenario 1: Founding Texts Organizational Structure	Scenario 2: Intermediate Organizational Structure	Scenario 3: Light Organizational Structure
Benin	348,891,000	272,846,000	250,661,000
Togo	548,001,000	428,558,000	393,712,000
Tax financing	241,923,000	192,786,000	167,471,000
Donors	481,190,000	481,190,000	481,190,000
Total	**1,620,005,000**	**1,375,380,000**	**1,293,034,000**

Source: RebelGroup

From year 6 onwards, the complete organizational structure contemplated under Scenarios 1, 2 and 3 would be in place and supported by tax financing. The table below shows the overall long-term cost allocation using regional tax financing, assuming that donors continue to fund 80% of the investment/activity budget.

Table 23: Annual Long-Term Cost Allocation under Regional Tax Financing

Item	Scenario 1: Founding Texts Organizational Structure	Scenario 2: Intermediate Organizational Structure	Scenario 3: Light Organizational Structure
Benin	-	-	-
Togo	-	-	-
Tax financing	555,568,000	451,168,000	362,966,000
Donors	240,000,000	240,000,000	240,000,000
Total	**795,568,000**	**691,168,000**	**602,966,000**

Source: RebelGroup

Given CICOS' overall positive experience with regional tax financing, leveraging a community levy could be an attractive option for the MBA. However, as aforementioned, such an ambitious political project would need to be undertaken with the support of other regional RBOs as well as with ECOWAS or other regional organizations. As stated, the WRCU could potentially play a pivotal role in developing a proposal for regional tax financing within ECOWAS and support the MBA and other RBOs in its implementation.

9.4 Conclusions on Medium- & Long-Term Financing Strategies

Because user fee-based and regional tax financing would require time to implement and institutionalize, member states should be prepared to continue their direct financial contributions in the meanwhile.

This section outlined three potential medium- and long-term financing strategies for the MBA. With the exception of the first strategy—continuation of the short-term financing approach, relying on both membership contributions and donor funding—the other two proposed strategies (user fee-based financing and regional tax financing) require significant stakeholder consultation and preparation. As a result, user fee-based financing and regional tax financing would not be immediately available to fund the MBA's operations. The two member states would need to continue their direct financial contributions while the user fee-based or regional tax financing is institutionalized.

Based on its analysis and stakeholder outreach, the Team believes that a user fee-based financing mechanism is the most promising medium- and long-term financing strategy for the MBA for the following reasons:

- Consultation during the field missions and the workshop organized to validate the MBA financing strategy confirmed that there is a strong support for user-fee based financing among stakeholders in both member states.
- A user fee-based financing strategy directly links the benefits of water use with economic activity, which is a key principle underpinning IWRM. Furthermore, the concept of user fee-based financing is enshrined in both member states' water law as well as the MBA's Convention.
- A user fee-based financing strategy is expected to takes less time to implement than a regional tax, especially if only a limited number of large water users is charged. It will also likely involve fewer entities, simplifying the process of establishing the financing mechanism.

10 Conclusions & Recommendations

Experience shows that RBOs face numerous challenges in the early years of establishment, which the MBA is hoping to address in part through this Study.

Newly-established RBOs need to clearly define their mandate and strategy and identify appropriate and reliable sources to fund both operational costs and project activities. The effectiveness of early-stage RBO formation depends on factors ranging from political will to availability of government and donor funding, and effective planning and coordination.

The MBA is currently at an incipient yet critical stage of its formation and establishment. Although its structure has been defined through constitutive texts, the authority has yet to be institutionalized and operationalized. As a result, MBA decision-makers have the flexibility to define an organizational structure that will allow the authority to realize its mandate while being financeable in the long-term.

The purpose of this report was to identify, analyze, and propose short-, medium-, and long-term financing mechanisms to ensure the MBA's financial and technical sustainability. The mechanisms proposed were based on a methodology that included: (1) a review of global best practices through a comprehensive benchmarking exercise; (2) an analysis of the MBA's expected funding needs under the organizational structure proposed in the Founding Texts, and under two lighter organizational structures; (3) a risk- and opportunity-based identification and evaluation of potential funding sources; and (4) order-of-magnitude calculations to determine the feasibility of several funding mechanisms.

The Study notes that it may still be appropriate for the MBA to review its organizational structure to avoid placing an undue financial burden on member states and ensure the authority's financial sustainability.

The benchmarking exercise undertaken as part of the Study revealed that it is atypical for such a small river basin like Mono (24,000 km^2) to establish a formalized RBO with a relatively large secretariat. The benchmarking exercise also revealed that many RBOs struggle to meet their operational costs due to heavy institutional structures and/or unstable funding sources. Stakeholders also emphasized the importance of creating a lean and flexible organizational structure to avoid the financial challenges faced by other RBOs.

As a result of the above-mentioned considerations, the Study not only evaluated the budgetary implications of the MBA's proposed organizational structure, but also proposed two alternative (and lighter) organizational structures. These alternative organizational structures propose to reduce the MBA's long-term staff from 23 individuals (under the Founding Texts Organizational Structure) to approximately 17 individuals (under the Intermediate Organizational Structure) or 12 individuals (under the Light Organizational Structure). These alternative scenarios are expected to reduce the MBA's projected long-term operational costs by 21% and 39%, respectively, reducing budgetary implications for member states Togo and Benin.

In addition to proposing three scenarios for organizational structures, the Team identified additional cost saving approaches. These include: establishing working groups to reduce the need for a large

staff; taking advantage of in-kind contributions from member states; and considering staff secondments as an alternative to full-time positions during the early years. These cost-saving approaches could be applied under either of the three organizational and institutional scenarios should financing sources fall short of expectations.

Based on the evaluation of the MBA's funding needs and the identification of potential financing mechanisms, the Study proposed sustainable short-, medium-, and long-term financing strategies which are summarized below.

Short-Run Financing Strategy

In the short run (year 1-2 of operations), the MBA is expected to rely on member state contributions to cover operational costs. Given the important role of donors in supporting RBOs globally, they are expected to be willing to support a substantial portion of the MBA's investment and activities budget. The size of the activities budget remains to be determined as the Strategic Action Plan is still under development. Member state contributions could be reduced should donors allow the MBA to apply management & administration fees to their contributions.

Medium-Term Financing Strategy

In the medium term (years 3-5), the MBA would likely continue to use member state contributions to fund its operational budget while preparing for a transition to user fee-based financing or regional tax financing. Although the precedent for user fee-based financing for RBOs is limited, most stakeholders in Benin and Togo believe that users should contribute to the MBA's operating costs, which could provide the political backing required.

The Study recommends that initially, the MBA pursue a user fee-based mechanism by focusing on large water users such as the CEB (hydropower) or mining/industrial companies. Once a user fee-based mechanism based on a limited number of large water users has demonstrated its effectiveness, the MBA could decide to expand its user base to other large-scale water users (drinking water, irrigation, etc.) or small-scale users (rural drinking water supply and subsistence farmers). In the long-term, the MBA could also decide to complement user fees with a polluter fees. The success of a user fee-based financing strategy will ultimately depend on: 1) the MBA's ability to deliver demonstrable value to its users; 2) users' ability to perceive such a value in monetary terms; and 3) users' ability and willingness to financially support the MBA.

Although expected to require more time, resources, and political commitment, regional tax financing such as a community levy has the potential to be a stable and effective financing mechanism. Under this approach, the MBA could pursue regional tax financing (such as an import levy on goods coming into the ECOWAS region) as part of a wider regional strategy to support IWRM across RBOs. The regional strategy could be executed in close collaboration with ECOWAS' WRCU. Establishing and operationalizing a regional tax would be an ambitious political project affecting not only RBOs but also other regional institutions. It would likely be part of or accompanied by additional efforts towards regional integration.

Both user fee-based and regional tax financing mechanisms require substantial consultation and preparation and will, therefore, not be immediately available. Until the MBA undertakes the required

arrangements and throughout the transition period, the two member states will be expected to continue to finance the MBA's operating budget during the early years. Similar to the short-term strategy, donors would be expected to contribute to the investments and activities budget under the medium-term financing strategy.

Long-Term Financing Strategy

In the long run (year 6 onwards), it is expected that the MBA will be able to fund its entire operational budget from user fees, polluter fees, and/or tax revenues. It will be in the long-term best interest of the MBA to pursue these financing strategies and effectively prepare, implement, and operationalize them. As explained above, the Study recommends a user fee-based financing mechanism (potentially eventually combined with a polluter fee-based mechanism) as the most promising long-term financing strategy for the MBA. If the MBA requires further time to implement and operationalize these financing strategies, or if the MBA ultimately decides not to pursue these financing mechanisms, member states would need to continue to fund the operational budget through direct contributions. Under the long-term financing strategy, donors would be expected to continue to fund a large proportion of the MBA's investments and activities budget.

Annex I. List of Stakeholders during Field Missions (June 2016)

The table below lists the stakeholders consulted during the field missions to Burkina Faso, Benin, and Togo between 7 and 16 June 2016.

Table 24: Stakeholders Consulted during Field Missions

Name	Position	Organization	Unit
M. Mahamane TOURE	Conseil régionale	CEDEAO	Centre de Coordination des Ressources en Eau
M. Ibrahim WILSON	Directeur	CEDEAO	Centre de Coordination des Ressources en Eau
M. Ketessaoba OUEDRAOGO	Consultant indépendant pour le Plan Stratégique de l'ABM		
Mme. Katrina SHARKEY	Représentante résidente	World Bank (Benin)	
M. Sylvain Adokpo MIGAN	Spécialiste senior en eau et assainissement	World Bank (Benin)	
M. Erick Herman ABIASSI	Agroéconomiste principal	World Bank (Benin)	
M. Jean-Claude GBODOGBE	Secrétaire Générale	Ministry of Water (Benin)	
M. Arnaud ZANNOU	Directeur Générale	Ministry of Water (Benin)	Direction Générale des Ressources en Eau
M. Franco SEKLOKA	Administrateur en Gestion des Projets et Développement Local	Ministry of Water (Benin)	Direction Générale des Ressources en Eau
M. Michel YABI	Chef de Service Production et Transport de l'Energie	General Direction of Energy (Benin)	
Mme. Christiane KUADJO	Administrateur des Finances et Trésor	Ministry of Economics and Finances (Benin)	Direction Générale du Budget
M. Tchokponhoué ALLOMASSO	Directeur du Suivi des Bassins	Ministry of Water (Benin)	Direction Générale des Ressources en Eau
Mme. Stephanie PREUSS	Conseillère Internationale	GIZ	Projet « Réserve de Biosphère Transfrontalière du Delta du Mono »
Mme. Armelle Gloria HADONOU-YOVO	Coordinatrice Nationale – Bénin	GIZ	Projet « Réserve de Biosphère Transfrontalière du Delta du Mono »

Mme. Yasmina ADEBI	Chargée des Etudes, de la Documentation et du Suivi-Evaluation	GIZ	Projet « Réserve de Biosphère Transfrontalière du Delta du Mono »
Dr. Abdel Aziz OSSENI	Chargé de Cartographie et SIG	GIZ	Projet « Réserve de Biosphère Transfrontalière du Delta du Mono »
M. Corneille AHOUANSOU	Chargé de Projet	Global Water Partnership / West Africa	
M. Prospère SAGBO	Chef du service aménagement hydroagricole	Ministry of Agriculture, Farming and Fishing (Benin)	Direction Génie Rurale
M. Martin Pépin AINA	Directeur Générale de l'Environnement	Ministry of Environment (Benin)	
M. Euloge LIMA	Chef du Service de Surveillance et Prévention des Risques Environnementaux	Ministry of Environment (Benin)	
M. Wohou AKAKPO	Directeur des Ressources en Eau	Ministry of Agriculture, Farming, and Hydroelectricity (Togo)	Direction des Ressources en Eau
M. Rachid BARRY	Hydrogéologue	Ministry of Agriculture, Farming, and Hydroelectricity (Togo)	Direction des Ressources en Eau
Mme Abla TOZO	Gestionnaire des Ressources en Eau	Ministry of Agriculture, Farming, and Hydroelectricity (Togo)	Direction des Ressources en Eau
M. Affo Boni ADJAMA	Directeur de l'Approvisionnement en Eau Potable	Ministry of Agriculture, Farming, and Hydroelectricity (Togo)	
M. Abdel-Ganiou SOULEMANE	Spécialiste en Gestion Intégrée des Ressources en Eau	Ministry of Environment and Forestry (Togo)	
M. Koku SOVI	Administrateur des Services	Ministry of Economy and Finances (Togo)	Direction du Budget
M. Tcharabalo ABIYOU	Directeur Général de l'Energie	Ministry of Mines and Energy (Togo)	
M.	Directeur Général des Mines	Ministry of Mines and Energy (Togo)	
M. Armand D. GOMEZ	Directeur de la Production	Communauté Electrique du Benin (CEB)	
Mme. Noufoh DARE	Directrice des Programmes	Jeunes Volontaires pour l'Environnement (JVE)	

Annex II. Summary of Regional Validation Workshop

Location Sun Beach Hôtel in Cotonou, Benin

Dates 7 and 8 December 2016

Participants Approximately 30 participants, consisting of:

- Government officials from Benin and Togo;
- Representatives of civil society organizations active in the Mono River basin;
- Technical and financial partners (OIEau, GIZ);
- A representative of the VBA;
- A representative of the CEB;
- Staff from the ECOWAS Water Resources Coordination Center; and
- Consultants (BERD, RebelGroup, Mazars, Mr. Anani Kondo).

Objective The workshop objective was twofold:

- Discussion and validation of the MBA's Strategic Action Plan; and
- Discussion and validation the Study on sustainable financing mechanisms for the MBA (this report).

During the same week (on 6 and 9 December 2016), two other topics were discussed by the participants:

- Discussion and validation of the constitutive texts for the MBA's civil society platform; and
- Preparation of the MBA's first ordinary Council of Ministers meeting.

The latter are not included in the summary below as the consultants did not attend these meetings, which do not directly relate to the MBA's overall financing strategy.

Agenda The main items on the agenda of the workshop were as follows:

1. Validation of the Strategic Action Plan of the MBA;
2. Validation of the Study on autonomous and sustainable funding mechanisms for the MBA;
3. Sharing of experience by the Volta Basin Authority and the Rhone-Mediterranean and Corsica Water Agency *(Agence de l'eau Rhône Méditerranée Corse)*;
4. Sharing of experience by the CEB regarding sustainable autonomous financing.

1.Validation of the Strategic Action Plan of the ABM

The draft report on the strategic plan of the ABM was presented by Mr. Fulgence KI. This report includes the following elements:

- An analysis of the MBA's strengths, weaknesses, opportunities and threats;
- A Strategic Action Plan which was drafted on the basis of the above analysis and the consultants' experience working on other RBOs, broken down into five strategic objectives, which in turn are categorized into strategic outcomes and intermediate outcome; and
- An Operational Plan to implement the priority actions for the first two years of the MBA's operations, including monitoring and evaluation mechanisms for these priority actions.

During the exchanges following the consultants' presentation, the following key observations were made:

- Participants noted that the methodology used by the consultants to engage stakeholders in the process to develop the Strategic Action Plan should be clarified.
- Participants noted that there is no monitoring and evaluation mechanism included in the current draft of the Strategic Action Plan.
- Participants requested the consultants to consider whether the MBA should also be responsible for managing small coastal rivers as well as aquifers in the vicinity of the Mono River basin as no other organization will be in charge of managing those water resources.
- Participants noted that the report does not discuss the links between the Strategic Action Plan and the ECOWAS guidelines for water infrastructure development.
- Participants noted that the Strategic Action Plan was rather ambitious given the fact that the MBA is still not operational. Participants proposed to anticipate a gradual deployment of staff to avoid undue pressure on member states' budgets in the early years.
- Participants questioned the alignment of strengths and weaknesses with the proposed actions in the Strategic Action Plan.
- Participants questioned how gender may play a role in the Strategic Action Plan and wondered how the Strategic Action Plan could take better into consideration inputs from civil society organizations.
- Participants suggested the add the following actions to the Strategic Action Plan: Drafting of a charter, a procurement guide, and financial control procedural guide.
- Participants noted that the proposed Strategic Action Plan may need to be changed and updated once the MBA's executive direction will be in place.
- Participants noted that the Strategic Action Plan does currently not include a costing of the various proposed actions and can therefore not be aligned with the Study on sustainable financing mechanisms.
- Participants noted that the consultants did not obtain feedback from technical and financial partners regarding the proposed Strategic Action Plan.

The participants proceeded to validate the Strategic Action Plan, subject to the consultants satisfactorily addressing the feedback in the final draft of the document. Of particular relevance to the Study on sustainable financing mechanisms, the consultants were asked to 1) confirm with

technical and financial partners that they would potentially be interested in funding (parts of) the proposed Strategic Action Plan, and 2) provide a costing of the proposed Strategic Action Plan.

2. Validation of the Study on autonomous and sustainable funding mechanisms for the ABM

The draft report on the Study of sustainable financing mechanisms for the MBA was presented by the consultant team of RebelGroup, Mrs. Pauline HOVY and Mr. Wim VERDOUW.

During the exchanges following the consultants' presentation, the following key observations were made:

- Participants noted that most of the proposed financing mechanisms listed may be sustainable but not necessarily very innovative and requested the consultants to look at a variety of other financing mechanism, such as PPPs, diaspora financing, and project management fees for infrastructure development.
- Participants noted that the report did not provide a discussion on how the various financing mechanisms can be operationalized and requested that such a discussion be added to the report for the most promising financing mechanisms.
- Participants noted that the high population density in the Mono River basin provides an important rationale for creating the MBA.
- Participants noted that in two of the three organizational scenarios proposed by the consultants, the financial controller position was excluded and requested this position be maintained in all scenarios to ensure sufficient independent financial oversight.
- Participants requested that the basic parameters and assumptions underlying the three operating cost scenarios be included in the report.
- Participants noted that the concepts of "value-for-money" and "good governance" were not explicitly acknowledged in the report.
- Participants noted that according to the Convention, the MBA formally also has a mandate to pursue project implementation, not just coordination. Participants therefore requested that the report be updated to reflect this, acknowledging that the CEB would most likely retain responsibility over hydropower development.
- Participants noted that the consultants had a different interpretation of the cost sharing key calculation and requested the calculation be updated.

The participants proceeded to validate the Strategic Action Plan, subject to the consultants satisfactorily addressing the feedback in the final draft of the document.

3. Sharing of experience from the VBA and Rhone-Mediterranean and Corsica Water Agency

Mr. Razaki SANOUSSI, IWRM Planning Director for the Volta Basin Authority, shared his experience regarding strategic planning and implementation. More specifically, he discussed how the VBA had gone through two different planning exercises for the periods 2010-2014 and 2015-2019. Among the lessons learned were that insufficient and irregular funding created substantial difficulties for the VBA to implement its Strategic Action Plan. Other issues raised related to, among others, shortage in human resources to implement the its Strategic Action Plan and difficulties in recruitment procedures.

Mr. Razaki SANOUSSI also presented the financing mechanisms employed by the VBA. A key take away was that the VBA had a long-term funding shortage, as member states do not provide sufficient and regular funding.

In another presentation, Mr. Christophe BRACHET from the Rhone-Mediterranean and Corsica Water Agency explained how IWRM is implemented in Europe and how his agency supports various transboundary basin organizations around the world.

4. Sharing of Experience by the CEB regarding Sustainable Autonomous Financing.

Mr. Sotelle HOUESSOU from the CEB discussed how the CEB is funded. Given that electricity produced by the CEB is sold at a price well below the cost of producing energy, it requires substantial additional funding support, which includes a small margin on electricity sales (between 2 and 4 FCFA/kWh), direct financial contributions from the two member states as well as support from financial and technical partners.

Annex III. Summary of Key Cost Assumptions

Parameter	Value	Unit	Justification
Salary			
Hors catégorie – 1	1,360,040	FCFA/month	MBA Founding Text
Hors catégorie – 2	1,236,400	FCFA/month	MBA Founding Text
Cadres Supérieurs – A1	984,274	FCFA/month	MBA Founding Text
Cadres Supérieurs – A2	672,272	FCFA/month	MBA Founding Text
Cadres Supérieurs – A3	459,171	FCFA/month	MBA Founding Text
Cadres Moyens – B1	416,667	FCFA/month	CICOS budget[39]
Cadres Moyens – B2	416,667	FCFA/month	CICOS budget[39]
CadreAgents d'Exécution – C	250,000	FCFA/month	CICOS budget[39]
Staff Indemnities			
Hors catégorie – 1	400,000	FCFA/month	MBA Founding Text
Hors catégorie – 2	580,000	FCFA/month	MBA Founding Text
Cadres Supérieurs – A1	360,000	FCFA/month	MBA Founding Text
Cadres Supérieurs – A2	275,000	FCFA/month	MBA Founding Text
Cadres Supérieurs – A3	205,000	FCFA/month	MBA Founding Text
Cadres Moyens – B1	115,000	FCFA/month	MBA Founding Text
Cadres Moyens – B2	90,000	FCFA/month	MBA Founding Text
Agents d'Exécution – C	50,00	FCFA/month	MBA Founding Text
Other Indemnities			
Family allowance	5,000	FCFA/month/child	VBA budget[40]
Housing allowance[41]	1,500,000	FCFA/month	VBA budget
Medical insurance	53,611	FCFA/month/staff	VBA budget[42]
Other charges	95,833	FCFA/month/staff	VBA budget[42]
Office			
Rent	2,800,000	FCFA/month	VBA budget[43]
Water & electricity	1,500,000	FCFA/month	VBA budget[43]
Communication	900,000	FCFA/month	VBA budget[43]
Courier services	50,000	FCFA/month	VBA budget[43]

[39] MBA Founding Texts do not include salaries for lower level positions.

[40] An average of 3 children per staff is assumed, for a total of 15,000 FCFA/month/staff.

[41] Executive Director only.

[42] Monthly cost estimates are based on an assumed staff of 30 people.

[43] Actual cost for the MBA is adjusted for each scenario, based on the number of staff in each scenario: 80% of VBA cost for Scenario 1, 60% of VBA cost for Scenario 2, and 40% of VBA cost for Scenario 3.

Office supplies	1,000,000	FCFA/month	VBA budget[43]
Maintenance	950,000	FCFA/month	VBA budget[43]
Cleaning	300,000	FCFA/month	VBA budget[43]
Security	300,000	FCFA/month	VBA budget[43]
Banking charges	120,000	FCFA/month	VBA budget[43]
Financing charges	150,000	FCFA/month	VBA budget[43]
Media & documentation	166,667	FCFA/month	VBA budget[43]
Other charges	333,333	FCFA/month	VBA budget[43]
Insurance	250,000	FCFA/month	VBA budget[43]
Vehicles			
Fuel & lubricant	166,667	FCFA/month/vehicle	VBA budget
Maintenance	133,333	FCFA/month/vehicle	VBA budget
Insurance	133,333	FCFA/month/vehicle	VBA budget
External Services			
Professional services	22,000,000	FCFA/year	VBA budget[44]
IT & internet	4,500,000	FCFA/year	VBA budget[44]
Support & training	5,000,000	FCFA/year	VBA budget[44]
National Focal Structures			
Financial support	666,667	FCFA/year	VBA budget[45]
Training	1,666,667	FCFA/year	VBA budget[45]
Investment in Physical Assets			
Office furniture	14,760,000	FCFA	RebelGroup estimate
IT	24,600,000	FCFA	RebelGroup estimate
Vehicles	15,000,000	FCFA/ vehicle	RebelGroup estimate
Meetings & Missions			
Missions	16,666,667	FCFA/year	VBA budget[46]
Technical Committee of Experts Meetings	6,000,000	FCFA/meeting	RebelGroup estimate
Council of Ministers Meetings	5,000,000	FCFA/meeting	VBA budget[46]
Stakeholder Forum	8,666,667	FCFA/year	VBA budget[46]
Annual evaluation of Strategic Action Plan	1,666,667	FCFA/year	VBA budget[46]

[44] Based on VBA budget reduced by 50% to reflect fewer member states, no translation, smaller organizational structure.

[45] Based on VBA budget reduced to reflect fewer national focal structures.

[46] Based on VBA budget divided by three to reflect fewer member states and smaller organizational structure.

Annex IV. Operating Cost under Scenario 1

The table below provides a detailed overview of the MBA's operating costs under Scenario 1, as discussed in Section 7.1.

Element	Year 1 (2017)	Year 2 (2018)	Year 3 (2019)	Year 4 (2020)	Year 5 (2021)	Year 6 (2022)	Year 7 (2023)	Year 8 (2024)	Year 9 (2025)	Year 10 (2026)
Salaries and benefits	49,100,000	49,100,000	120,381,000	195,094,000	237,559,000	276,425,000	276,425,000	276,425,000	276,425,000	276,425,000
Family benefits	540,000	540,000	1,800,000	2,880,000	3,600,000	4,140,000	4,140,000	4,140,000	4,140,000	4,140,000
Medical Insurance	1,930,000	1,930,000	6,433,000	10,293,000	12,867,000	14,797,000	14,797,000	14,797,000	14,797,000	14,797,000
Other staff charges	1,200,000	1,200,000	4,000,000	6,400,000	8,000,000	9,200,000	9,200,000	9,200,000	9,200,000	9,200,000
Expatriated staff charges	2,250,000	2,250,000	7,500,000	12,000,000	15,000,000	17,250,000	17,250,000	17,250,000	17,250,000	17,250,000
Salaries and Benefits	***55,020,000***	***55,020,000***	***140,114,000***	***226,667,000***	***277,026,000***	***321,812,000***	***321,812,000***	***321,812,000***	***321,812,000***	***321,812,000***
Rent	6,720,000	6,720,000	11,760,000	16,800,000	21,840,000	26,880,000	26,880,000	26,880,000	26,880,000	26,880,000
Electricity and water	3,600,000	3,600,000	6,300,000	9,000,000	11,700,000	14,400,000	14,400,000	14,400,000	14,400,000	14,400,000
Communication	2,160,000	2,160,000	3,780,000	5,400,000	7,020,000	8,640,000	8,640,000	8,640,000	8,640,000	8,640,000
Mail and packages	120,000	120,000	210,000	300,000	390,000	480,000	480,000	480,000	480,000	480,000
Offices supplies and food/drink	2,400,000	2,400,000	4,200,000	6,000,000	7,800,000	9,600,000	9,600,000	9,600,000	9,600,000	9,600,000
Maintenance and reparations	2,280,000	2,280,000	3,990,000	5,700,000	7,410,000	9,120,000	9,120,000	9,120,000	9,120,000	9,120,000
Cleaning	720,000	720,000	1,260,000	1,800,000	2,340,000	2,880,000	2,880,000	2,880,000	2,880,000	2,880,000
Security and Parking Fees	720,000	720,000	1,260,000	1,800,000	2,340,000	2,880,000	2,880,000	2,880,000	2,880,000	2,880,000
Bank fees and postage stamps	288,000	288,000	504,000	720,000	936,000	1,152,000	1,152,000	1,152,000	1,152,000	1,152,000
Financial fees	360,000	360,000	630,000	900,000	1,170,000	1,440,000	1,440,000	1,440,000	1,440,000	1,440,000
Media and documentation	400,000	400,000	700,000	1,000,000	1,300,000	1,600,000	1,600,000	1,600,000	1,600,000	1,600,000
Miscellaneous (invitations, radio, etc.)	800,000	800,000	1,400,000	2,000,000	2,600,000	3,200,000	3,200,000	3,200,000	3,200,000	3,200,000
Insurance	600,000	600,000	1,050,000	1,500,000	1,950,000	2,400,000	2,400,000	2,400,000	2,400,000	2,400,000
Office Expenses	***21,168,000***	***21,168,000***	***37,044,000***	***52,920,000***	***68,796,000***	***84,672,000***	***84,672,000***	***84,672,000***	***84,672,000***	***84,672,000***
Vehicle Operating Costs	5,750,000	5,750,000	11,500,000	11,500,000	17,250,000	17,250,000	17,250,000	17,250,000	17,250,000	17,250,000
External Services	6,300,000	6,300,000	12,600,000	18,900,000	25,200,000	31,500,000	31,500,000	31,500,000	31,500,000	31,500,000
Functioning of National Focal Structures	2,333,000	2,333,000	2,333,000	2,333,000	2,333,000	2,333,000	2,333,000	2,333,000	2,333,000	2,333,000
Other Operating Costs	***14,383,000***	***14,383,000***	***26,433,000***	***32,733,000***	***44,783,000***	***51,083,000***	***51,083,000***	***51,083,000***	***51,083,000***	***51,083,000***
Missions	3,333,000	3,333,000	6,667,000	10,000,000	13,333,000	16,667,000	16,667,000	16,667,000	16,667,000	16,667,000
Meetings of Technical Expert Committee	18,000,000	18,000,000	12,000,000	12,000,000	12,000,000	6,000,000	6,000,000	6,000,000	6,000,000	6,000,000
Council of Ministers Meetings	5,000,000	5,000,000	5,000,000	5,000,000	5,000,000	5,000,000	5,000,000	5,000,000	5,000,000	5,000,000
Stakeholder Forum Meetings	8,667,000	8,667,000	8,667,000	8,667,000	8,667,000	8,667,000	8,667,000	8,667,000	8,667,000	8,667,000
Annual Evaluation of Strategic Action Plan Activities	1,667,000	1,667,000	1,667,000	1,667,000	1,667,000	1,667,000	1,667,000	1,667,000	1,667,000	1,667,000
Meetings and Missions	***36,667,000***	***36,667,000***	***34,001,000***	***37,334,000***	***40,667,000***	***38,001,000***	***38,001,000***	***38,001,000***	***38,001,000***	***38,001,000***
Operating Budget	**127,238,000**	**127,238,000**	**237,592,000**	**349,654,000**	**431,272,000**	**495,568,000**	**495,568,000**	**495,568,000**	**495,568,000**	**495,568,000**

Annex V. Operating Cost under Scenario 2

The table below provides a detailed overview of the MBA's operating costs under Scenario 2, as discussed in Section 7.2.

Element	Year 1 (2017)	Year 2 (2018)	Year 3 (2019)	Year 4 (2020)	Year 5 (2021)	Year 6 (2022)	Year 7 (2023)	Year 8 (2024)	Year 9 (2025)	Year 10 (2026)
Salaries and benefits	49,100,000	49,100,000	80,199,000	127,035,000	169,501,000	208,367,000	208,367,000	208,367,000	208,367,000	208,367,000
Family benefits	540,000	540,000	1,080,000	1,800,000	2,520,000	3,060,000	3,060,000	3,060,000	3,060,000	3,060,000
Medical Insurance	1,930,000	1,930,000	3,860,000	6,433,000	9,007,000	10,937,000	10,937,000	10,937,000	10,937,000	10,937,000
Other staff charges	1,200,000	1,200,000	2,400,000	4,000,000	5,600,000	6,800,000	6,800,000	6,800,000	6,800,000	6,800,000
Expatriated staff charges	2,250,000	2,250,000	4,500,000	7,500,000	10,500,000	12,750,000	12,750,000	12,750,000	12,750,000	12,750,000
Salaries and Benefits	***55,020,000***	***55,020,000***	***92,039,000***	***146,768,000***	***197,128,000***	***241,914,000***	***241,914,000***	***241,914,000***	***241,914,000***	***241,914,000***
Rent	6,720,000	6,720,000	10,080,000	13,440,000	16,800,000	20,160,000	20,160,000	20,160,000	20,160,000	20,160,000
Electricity and water	3,600,000	3,600,000	5,400,000	7,200,000	9,000,000	10,800,000	10,800,000	10,800,000	10,800,000	10,800,000
Communication	2,160,000	2,160,000	3,240,000	4,320,000	5,400,000	6,480,000	6,480,000	6,480,000	6,480,000	6,480,000
Mail and packages	120,000	120,000	180,000	240,000	300,000	360,000	360,000	360,000	360,000	360,000
Offices supplies and food/drink	2,400,000	2,400,000	3,600,000	4,800,000	6,000,000	7,200,000	7,200,000	7,200,000	7,200,000	7,200,000
Maintenance and reparations	2,280,000	2,280,000	3,420,000	4,560,000	5,700,000	6,840,000	6,840,000	6,840,000	6,840,000	6,840,000
Cleaning	720,000	720,000	1,080,000	1,440,000	1,800,000	2,160,000	2,160,000	2,160,000	2,160,000	2,160,000
Security and Parking Fees	720,000	720,000	1,080,000	1,440,000	1,800,000	2,160,000	2,160,000	2,160,000	2,160,000	2,160,000
Bank fees and postage stamps	288,000	288,000	432,000	576,000	720,000	864,000	864,000	864,000	864,000	864,000
Financial fees	360,000	360,000	540,000	720,000	900,000	1,080,000	1,080,000	1,080,000	1,080,000	1,080,000
Media and documentation	400,000	400,000	600,000	800,000	1,000,000	1,200,000	1,200,000	1,200,000	1,200,000	1,200,000
Miscellaneous (invitations, radio, etc.)	800,000	800,000	1,200,000	1,600,000	2,000,000	2,400,000	2,400,000	2,400,000	2,400,000	2,400,000
Insurance	600,000	600,000	900,000	1,200,000	1,500,000	1,800,000	1,800,000	1,800,000	1,800,000	1,800,000
Office Expenses	***21,168,000***	***21,168,000***	***31,752,000***	***42,336,000***	***52,920,000***	***63,504,000***	***63,504,000***	***63,504,000***	***63,504,000***	***63,504,000***
Vehicle Operating Costs	5,750,000	5,750,000	11,500,000	11,500,000	17,250,000	17,250,000	17,250,000	17,250,000	17,250,000	17,250,000
External Services	6,300,000	6,300,000	12,600,000	18,900,000	25,200,000	31,500,000	31,500,000	31,500,000	31,500,000	31,500,000
Functioning of National Focal Structures	2,333,000	2,333,000	2,333,000	2,333,000	2,333,000	2,333,000	2,333,000	2,333,000	2,333,000	2,333,000
Other Operating Costs	***14,383,000***	***14,383,000***	***26,433,000***	***32,733,000***	***44,783,000***	***51,083,000***	***51,083,000***	***51,083,000***	***51,083,000***	***51,083,000***
Missions	3,333,000	3,333,000	5,833,000	8,333,000	10,833,000	13,333,000	13,333,000	13,333,000	13,333,000	13,333,000
Meetings of Technical Expert Committee	18,000,000	18,000,000	12,000,000	12,000,000	12,000,000	6,000,000	6,000,000	6,000,000	6,000,000	6,000,000
Council of Ministers Meetings	5,000,000	5,000,000	5,000,000	5,000,000	5,000,000	5,000,000	5,000,000	5,000,000	5,000,000	5,000,000
Stakeholder Forum Meetings	8,667,000	8,667,000	8,667,000	8,667,000	8,667,000	8,667,000	8,667,000	8,667,000	8,667,000	8,667,000
Annual Evaluation of Strategic Action Plan Activities	1,667,000	1,667,000	1,667,000	1,667,000	1,667,000	1,667,000	1,667,000	1,667,000	1,667,000	1,667,000
Meetings and Missions	***36,667,000***	***36,667,000***	***33,167,000***	***35,667,000***	***38,167,000***	***34,667,000***	***34,667,000***	***34,667,000***	***34,667,000***	***34,667,000***
Operating Budget	**127,238,000**	**127,238,000**	**183,391,000**	**257,504,000**	**332,998,000**	**391,168,000**	**391,168,000**	**391,168,000**	**391,168,000**	**391,168,000**

Annex VI. Operating Cost under Scenario 3

The table below provides a detailed overview of the MBA's operating costs under Scenario 2, as discussed in Section 7.3.

Element	Year 1 (2017)	Year 2 (2018)	Year 3 (2019)	Year 4 (2020)	Year 5 (2021)	Year 6 (2022)	Year 7 (2023)	Year 8 (2024)	Year 9 (2025)	Year 10 (2026)
Salaries and benefits	49,100,000	49,100,000	80,199,000	115,668,000	143,166,000	154,533,000	154,533,000	154,533,000	154,533,000	154,533,000
Family benefits	540,000	540,000	1,080,000	1,620,000	1,980,000	2,160,000	2,160,000	2,160,000	2,160,000	2,160,000
Medical Insurance	1,930,000	1,930,000	3,860,000	5,790,000	7,077,000	7,720,000	7,720,000	7,720,000	7,720,000	7,720,000
Other staff charges	1,200,000	1,200,000	2,400,000	3,600,000	4,400,000	4,800,000	4,800,000	4,800,000	4,800,000	4,800,000
Expatriated staff charges	2,250,000	2,250,000	4,500,000	6,750,000	8,250,000	9,000,000	9,000,000	9,000,000	9,000,000	9,000,000
Salaries and Benefits	***55,020,000***	***55,020,000***	***92,039,000***	***133,428,000***	***164,873,000***	***178,213,000***	***178,213,000***	***178,213,000***	***178,213,000***	***178,213,000***
Rent	6,720,000	6,720,000	8,400,000	10,080,000	11,760,000	13,440,000	13,440,000	13,440,000	13,440,000	13,440,000
Electricity and water	3,600,000	3,600,000	4,500,000	5,400,000	6,300,000	7,200,000	7,200,000	7,200,000	7,200,000	7,200,000
Communication	2,160,000	2,160,000	2,700,000	3,240,000	3,780,000	4,320,000	4,320,000	4,320,000	4,320,000	4,320,000
Mail and packages	120,000	120,000	150,000	180,000	210,000	240,000	240,000	240,000	240,000	240,000
Offices supplies and food/drink	2,400,000	2,400,000	3,000,000	3,600,000	4,200,000	4,800,000	4,800,000	4,800,000	4,800,000	4,800,000
Maintenance and reparations	2,280,000	2,280,000	2,850,000	3,420,000	3,990,000	4,560,000	4,560,000	4,560,000	4,560,000	4,560,000
Cleaning	720,000	720,000	900,000	1,080,000	1,260,000	1,440,000	1,440,000	1,440,000	1,440,000	1,440,000
Security and Parking Fees	720,000	720,000	900,000	1,080,000	1,260,000	1,440,000	1,440,000	1,440,000	1,440,000	1,440,000
Bank fees and postage stamps	288,000	288,000	360,000	432,000	504,000	576,000	576,000	576,000	576,000	576,000
Financial fees	360,000	360,000	450,000	540,000	630,000	720,000	720,000	720,000	720,000	720,000
Media and documentation	400,000	400,000	500,000	600,000	700,000	800,000	800,000	800,000	800,000	800,000
Miscellaneous (invitations, radio, etc.)	800,000	800,000	1,000,000	1,200,000	1,400,000	1,600,000	1,600,000	1,600,000	1,600,000	1,600,000
Insurance	600,000	600,000	750,000	900,000	1,050,000	1,200,000	1,200,000	1,200,000	1,200,000	1,200,000
Office Expenses	***21,168,000***	***21,168,000***	***26,460,000***	***31,752,000***	***37,044,000***	***42,336,000***	***42,336,000***	***42,336,000***	***42,336,000***	***42,336,000***
Vehicle Operating Costs	5,750,000	5,750,000	11,500,000	11,500,000	17,250,000	17,250,000	17,250,000	17,250,000	17,250,000	17,250,000
External Services	6,300,000	6,300,000	12,600,000	18,900,000	25,200,000	31,500,000	31,500,000	31,500,000	31,500,000	31,500,000
Functioning of National Focal Structures	2,333,000	2,333,000	2,333,000	2,333,000	2,333,000	2,333,000	2,333,000	2,333,000	2,333,000	2,333,000
Other Operating Costs	***14,383,000***	***14,383,000***	***26,433,000***	***32,733,000***	***44,783,000***	***51,083,000***	***51,083,000***	***51,083,000***	***51,083,000***	***51,083,000***
Missions	3,333,000	3,333,000	5,000,000	6,667,000	8,333,000	10,000,000	10,000,000	10,000,000	10,000,000	10,000,000
Meetings of Technical Expert Committee	18,000,000	18,000,000	12,000,000	12,000,000	12,000,000	6,000,000	6,000,000	6,000,000	6,000,000	6,000,000
Council of Ministers Meetings	5,000,000	5,000,000	5,000,000	5,000,000	5,000,000	5,000,000	5,000,000	5,000,000	5,000,000	5,000,000
Stakeholder Forum Meetings	8,667,000	8,667,000	8,667,000	8,667,000	8,667,000	8,667,000	8,667,000	8,667,000	8,667,000	8,667,000
Annual Evaluation of Strategic Action Plan Activities	1,667,000	1,667,000	1,667,000	1,667,000	1,667,000	1,667,000	1,667,000	1,667,000	1,667,000	1,667,000
Meetings and Missions	***36,667,000***	***36,667,000***	***32,334,000***	***34,001,000***	***35,667,000***	***31,334,000***	***31,334,000***	***31,334,000***	***31,334,000***	***31,334,000***
Operating Budget	**127,238,000**	**127,238,000**	**177,266,000**	**231,914,000**	**282,367,000**	**302,966,000**	**302,966,000**	**302,966,000**	**302,966,000**	**302,966,000**