

# Cooperation in International Waters in Africa: Annual Report FY2019

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# Foreword

A year ago, CIWA committed to deepening its engagement in fragile and conflict-affected situations. The need was described in the 2018 Annual Report:

**“By 2030, 60% of the extreme poor are likely to be living in fragile and conflict-affected situations, and at least half of the world’s fragile nations are in Africa. Fragility and water scarcity are tightly linked, and both transcend national borders. Water crises strain the ability of individuals and societies to maintain their livelihoods and can lead to social and political instability. Conversely, existing fragility makes it harder to address water challenges.”**

In this 2019 Annual Report, we discuss the progress made toward this commitment, particularly in the Horn of Africa.

In 2018, the CIWA Advisory Committee also agreed on the need to extend the program’s initial 2011–21 timeframe, and CIWA has now been extended to 2026. This extension, coupled with additional financial contributions, suggests confidence in the CIWA Program’s design and performance. But more importantly, it also shows a shared understanding of the importance of transboundary waters to Africa’s socio-economic future, and that progress is neither automatic nor simple.

As this Annual Report discusses, planned support does not always progress smoothly or quickly. The underlying design of CIWA – enabling long-term ‘all-weather’ support to priority engagements; highly flexible ‘opportunistic’ engagements when the political stars align; and regional analytic and technical assistance work – has proved robust. But there is also a clear need to continue to innovate around the approaches we use to ensure that the resources CIWA has are turned into results as efficiently as possible.

One way that CIWA is exploring this is by helping connect clients to innovative ways to utilize new technologies to measure and manage water. The pace of technical and analytic innovation across the world is impressive, but the gap between the potential of such approaches and the actual practice of them is only growing. CIWA is focusing on how we might facilitate more ‘wholesale’ and regional approaches to connecting clients to such innovation, including working together with partners such as the Global Partnership for Sustainable Development Data (GPSDD), the African Ministers Council on Water (AMCOW), and the African Network of Basin Organizations (ANBO).

We are deeply grateful to our donors for their commitment to these approaches.

**William Rex,**  
CIWA Program Manager

# Highlights from FY19

## Horn of Africa Groundwater

The US\$2.7 million Horn of Africa Groundwater Initiative was approved in May 2019. The two-year project will be implemented by the Inter-Governmental Authority on Development (IGAD) and includes support for consolidating and improving access to groundwater data, institutional capacity building, and feasibility studies for economically exploitable groundwater resources in three transboundary aquifers. The aquifers were prioritized by the IGAD member countries.

## Somalia

The Bank-executed, US\$400,000 Support to Transboundary Water Management Project in Somalia has progressed rapidly. The activity is aimed at helping Somalia better understand its transboundary water so that the Federal Government of Somalia can have constructive dialogue with other countries with which it shares rivers and groundwater. senior technical advisor is working with the Ministry of Energy and Water Resources to develop their approach, and several Government staff have been supported to travel to international forums focusing on transboundary water discussions. The support is being expanded to develop Somalia's water resource modeling capacity.

## Nile

The Nile Secretariat has continued to provide a platform for cooperation in the basin, informed by tools such as the Nile Basin Decision Support System and basin-wide hydromet and climate change models. The Nile Basin Initiative (NBI) has pioneered regional standards and implementation capacity building for dam safety and dam cascades, and is proposing to host a Regional Center of Dam Safety Excellence.

## Volta

CIWA financing provided to the Autorité du Bassin de la Volta (Volta Basin Authority; ABV) allowed the preparation of a number of investments (feasibility studies and detailed engineering design) for watershed restoration, riverbank protection and sustainable livelihoods. There were delays in project implementation due to a combination of over-optimism in project design, low implementation capacity of the client, and restructuring. As a result, there was not enough time to implement the investments that were prepared.

## Zambezi

The information and Decision Support System for the Zambezi River Basin has been created as an evolving mechanism that operates through an interactive process to provide joint online and offline planning and problem-solving processes with the capability of engaging all or a number of basin state technical and policy representatives in the planning and decision-making process for an agreed objective. Its development was a collaborative process with national experts whose capacity was, in part, built through a number of trainings, setting a good foundation for future open and transparent collaboration.

## Digital Data

The Digital Data Initiative is helping countries and basin organizations improve their capacity in information support systems where ground and remotely sensed data are collected, managed, and analyzed for specific applications such as assessment of water resources. The initiative will support selected countries and regional organizations in data collection, data management, analysis and interpretation. This analysis-ready information system for decision makers will improve evidence-based decisions about water resources.

# Pathways to Sustainable Development

CIWA's programs are largely implemented in specific basins, economic communities, or countries. However, there are also some cross-cutting themes that CIWA promotes and tracks across all of its programs. These themes include resilience to climate change, gender equality and social inclusion, and strengthening local technical capacity. CIWA believes these are key ingredients for the sustainable and effective use of our resources, and some of the highlights related to these themes are outlined below. Climate change resilience, gender equality, and strong local technical capacity are requisites to sustainable and effective use of the concrete and dollars embedded in our investments and infrastructure. For CIWA, the pathways through which individual human capital is advanced by implementation of the project, combined with sustainable regional cooperation, are the pathways for national prosperity.

## Climate Resilience

**Water is the means through which the impacts of climate change are first felt. Variability in rainfall and water run-off are already affecting the continent of Africa through extremes – droughts and floods – as well as threatening a 'new normal' of drying cities, reduced hydroelectric power, and shorter growing seasons. Like water, climate change does not respect national boundaries, and international cooperation is necessary for assessing risks, anticipating extreme events, and developing and operating infrastructure, among other actions. For this reason, climate concerns have been built into CIWA from its launch and are deeply embedded in our sub-regional programs as well as our analytic work.**

The CIWA-financed Niger Basin Climate Resilience Investment Plan (CRIP), adopted in November 2015, was developed by the Niger Basin countries to mobilize and coordinate investments in climate resilience. The CRIP pairs strategic climate change responses with development planning through the Knowledge and Institutions Package (54 actions) and the Sectoral Investment Package (192 actions). Each package consists of actions identified in Niger Basin countries' national climate adaptation processes as well as regionally identified actions.

The Nile Basin Initiative (NBI) provided training to all Eastern Nile riparian countries on several high-priority climate resilience issues including reservoir sedimentation, drought monitoring, flood forecasting, and preparedness. Current work is expanding the geographic implementation of the program as well as implementing drought forecasting. Their work has been featured in two discussion papers from the Food and Agriculture Organization of the United Nations, *Building Resilience to Shocks and Protracted Crises in the Middle East and North Africa* and *Water Management in Fragile Systems: Building Resilience to Shocks and Protracted Crises in the Middle East and North Africa*. The NBI work is a good example of how services such as flood forecasting can benefit all riparian countries while not requiring physical investment in all countries – especially useful when fragile or conflict-affected countries are involved.

At a more community-focused level, the Nile Basin Discourse (NBD) implemented multiple activities to provide training and seed funding for climate-resilient alternative livelihoods programs (some focused toward youth and women) in Kenya, Tanzania, and Uganda. They also facilitated climate risk management capacity building across the Nile Basin.

The Southern African Development Community (SADC) is working to better understand transboundary aquifers in order to improve sustainable conjunctive use of the resource. The regionally-coordinated conjunctive use of surface and groundwater is key to managing the increasing variability that Southern Africa is facing. So far only three out of 30 aquifers have been

comprehensively assessed in order to understand their full groundwater potential, especially at the transboundary level. Currently, through SADC's Soil and Groundwater Management Plan, the Shire Transboundary River/Aquifer System project is under implementation. Now that the SADC Groundwater Management Institute is fully established, the pace of work has accelerated, and it will require additional funds to cover the key aquifers that are not yet properly studied.

The Volta River Basin program supported ratification of the regional Water Charter, and in so doing provided training to 180 civil society organizations (30 per country) involved in climate resilience and the environment, bringing together key strategic partners from the six countries. The Autorité du Bassin de la Volta (Volta Basin Authority; ABV) will continue implementation of the strategic communication plan through community and rural radio to increase awareness of climate change issues in the basin.

The Zambezi Basin Commission has developed the Zambezi Water Resources Information System (ZAMWIS) with CIWA support. ZAMWIS is a database, planning tool, and flow forecasting system implemented to support climate monitoring and climate sensitive planning in the basin. Earth observation data is regularly downloaded, processed, and uploaded to the ZAMWIS Database and thereby shared with the riparian states. Data collected by individual riparian states is shared on a quarterly basis. *Rules and Procedures for Sharing of Data and Information Related to the Management and Development of the Zambezi Watercourse* have been developed to facilitate data sharing among riparian states.

Finally, CIWA recently published a report entitled *Climate Resilience in Africa: The Role of Cooperation around Transboundary Waters*. This documents the relationships between climate change, livelihoods, and water management across Sub-Saharan Africa. The report proposes a framework for cooperation and climate resilience that would help River Basin Organizations, riparian states, water management authorities, development partners, and other stakeholders formulate strategies to tackle transboundary water issues.

## **Technical Capacity Building to Improve Regional Cooperation**

**CIWA is a vital source of technical assistance, offering support to transboundary water institutions through policy advice, research and analysis, and technical assistance. The analytical work supported by CIWA often underpins financing and investments. CIWA supports capacity development in the institutions that we serve, and participates in many conferences hosted by the transboundary institutions that we support. When countries can find a common technical and scientific understanding, a door has opened for expanding cooperation and dialogue.**

The Southern African Development Community (SADC) Groundwater Management Institute is providing a technical and scientific platform for exchange among SADC institutions, governments and service agencies. Studies, guidelines, manuals and trainings benefit a wide range of stakeholders in the region.

Through its Dam Safety Program, the Nile Basin Initiative (NBI) worked with the Eastern Nile countries of Egypt, Ethiopia, South Sudan and Sudan to build technical capacity and establish harmonized regional policy and safety norms. Through the program, these countries have participated in a series of hands-on dam safety workshops, developed regional and national training curricula, and created national dam safety units. Future work will include expanding these activities to the Nile Equatorial Lakes region and building a Regional Center of Dam Safety Excellence. Developing national technical capacity to utilize dam cascade planning, and using flood forecasting

to support early warning systems, are other examples of cooperation in the Nile Basin built on scientific collaboration.

Likewise, the Zambezi Water Resources Information System (ZAMWIS) is currently being modernized and fully operationalized to provide an effective platform for data, information, and knowledge collection, assessment and sharing in the Zambezi River Basin. The improved ZAMWIS will include a Decision Support System for riparian transboundary development scenario analysis and tools for flow forecasting and monitoring. It will be part of the technology utilized to mitigate the impact of water shocks with operational collaboration among riparian states, including such mechanisms as dam synchronization, flood and drought early warning systems, and coordination between riparian state disaster management structures.

Through the activities implemented by the projects, training on technical issues, and stakeholder forums, CIWA has provided opportunities for riparian states to come together on technical and scientific grounds. While as a society we have not realized the full advantages of water resource management transboundary cooperation, CIWA has helped to set the stage where countries can agree on their individual advantages and disadvantages in investment prioritization through a lens of commonly recognized and transparent information.

## Gender and Social Inclusion

**CIWA recognizes women's and girls' unequal access to water resources, their unequal participation in water management processes, and the unequal burden they shoulder from water-related development and climate challenges. To mitigate these inequalities CIWA facilitates the inclusion of nongovernmental organizations, civil society organizations, and other organizations representing the interests and rights of women in stakeholder advisory groups, dialogues with civil society, and stakeholder research, and makes major efforts to improve bottom-up and horizontal communication among civil society organisations.**

Communications materials, information portals, and knowledge partnerships developed with CIWA support are informed by the gender-differentiated reality of climate risks and vulnerability that men and women face and the leadership roles women play in building climate change resilience. The Autorité du Bassin de la Volta (Volta Basin Authority; ABV) finalized its Communications Strategy and Plan, which consulted at least 500 people, including civil society organizations specifically representing women's interests. Implementation through the community and rural radio outreach began in July 2019 to increase local stakeholder awareness.

Women's water use priorities are sometimes in competition among water users and are therefore considered explicitly in planning and implementation of development processes to ensure equitable benefit sharing. To this end, CIWA-supported work with water commissions, water juries, irrigation cooperatives, and women's organizations plays an important role in helping resolve water-related disputes among local stakeholders.

In the Zambezi Basin, the Zambezi Watercourse Commission approved a Gender Mainstreaming Strategy and Implementation Plan (November, 2018) which was harmonized with the Southern African Development Community (SADC) system-wide policy on gender equality. This gender strategy outlines five strategic objectives and priority measures that are being used to enhance gender mainstreaming in three areas of intervention: structural, personnel, and outputs. The Zambezi Watercourse Strategic Plan Report (February, 2019) also acknowledges the gender mainstreaming aspects of the project's livelihood support activities in marginalized communities. SADC's own gender mainstreaming framework was ratified by member states in 2015. In 2019,

SADC's cumulative female direct beneficiary number reached 9,150 women (58% of the total direct beneficiaries).

The Nile Basin Discourse (NBD) has specifically worked to enhance the knowledge and skills of women and youth in climate resilience and involve them in investment planning activities in the Nile Basin. Gender and youth engagements helped grassroots community leaders to overcome barriers and agree to equitable benefits from the Lakes Edward and Albert Fisheries and Water Resources Management Project II. At the Bara Akobo Sobat investment, the NBD orchestrated community dialogues that were key to allowing contractors access to the site and facilitated cooperation between Nile Basin Initiative (NBI) consultants and local communities. The NBD also leveraged seed funding from Coca-Cola and the IHE-Delft program to target women participants in climate-resilient livelihoods training.

Systematic gender mainstreaming policies and strategies are now actively being implemented in CIWA-supported basin authorities, and we expect to see enhanced hiring of women into high positions over the coming years. Efforts to obtain gender parity in training and events still fall short; however, activities like the NBI Young Professional Program target the recruitment of women and have attracted female engineers from many partner countries. Future movement toward parity will hopefully build as local women achieve greater access to tertiary education and professional degrees.



# FY19 Challenges and Responses

The last year has seen the closing of several major engagements, but apart from in the Horn of Africa, limited new commitments. The reasons for this are partly related to the specifics of each engagement, and partly related to the World Bank's own process of reviewing its approach to regional programs in Africa. The World Bank's review started from an understanding of the critical importance of regional integration in Africa and a desire to scale up impact through fewer, bigger projects. As a result, the Bank has appointed a new Director of Regional Integration for Africa (spanning both Sub-Saharan and Northern Africa) who is responsible for a more strategic and coordinated approach to regional programs. While this review process was ongoing, very few new regional engagements were approved, which significantly impacted CIWA's pipeline.

## West Africa

**Niger:** The current CIWA-supported program has been moving very slowly and has consistently been rated as 'Moderately Unsatisfactory' by the Bank's team. The project was restructured in 2018 to help focus the commitments, and the project was reduced in size from US\$7.5 million to US\$4.2 million. The project, due to close at the end of December 2019, was recently upgraded to 'Moderately Satisfactory' following implementation progress. Given slow movement, the planned International Development Association project that CIWA was going to co-finance has not progressed.

**Volta:** *The Volta River Basin Strategic Action Programme Implementation* project closed at the end of August 2019 with a 'Moderately Unsatisfactory' rating due to limited progress on the small infrastructure-related work to be supported under the project, and with roughly half of the CIWA grant of US\$3.5 million disbursed. The design seems to have been overly optimistic in including infrastructure activities to be implemented in a four-year period, through a basin governance framework, with a relatively new agency and without any feasibility studies conducted at project entry. An Implementation Completion Report is under preparation and will provide a fuller set of lessons from this project.

### Next Steps – An Evolving Approach:

While implementation progress has been slow, CIWA remains committed to the Niger Basin given its central importance to the socio-economic development of several poor and fragile states. CIWA will continue to work with the Niger Basin Authority, the legally mandated institution for supporting collective management of the river. However, CIWA will also seek to work directly with some of the individual countries to enable a stronger understanding of national dependence on the shared river, as well as how national investments can have regional benefits.

More broadly, CIWA recognizes that across West Africa, from the Senegal River to Lake Chad, there are some 20 transboundary water basins shared by 30 countries, each with their own set of challenges, but also some common experiences and interests. There are important lessons to be learned from some of the stronger institutions – such as the Organisation pour la mise en valeur du fleuve Sénégal (Senegal River Basin Development Authority; OMVS) – that could be shared regionally.

CIWA is currently finalizing the design of a Bank-executed program of analytics and technical assistance to support West African basins. Given the importance of flexibility (including the need to avoid CIWA resources being committed to programs that do not progress), and the need to reduce transaction costs, this is being designed as a flexible 'West Africa' programmatic instrument where individual activities can be added or dropped as conditions on the ground dictate.

## East Africa

**Nile:** The Nile program continues to progress well with the NBI Secretariat, Eastern Nile Technical Regional Office (ENTRO), and Nile Equatorial Lakes Subsidiary Action Program (NELSAP) each showing the commitment and capacity required for effective implementation. The NBD has also been effective at facilitating civic engagement. However, both the NBI and NBD need to make further progress in improving their financial sustainability. The NCORE program will formally close at the end of November 2020, but all of the current resources will have been used well before then. The NBI has started preparations for a next phase of support. The key challenge for the Nile is the need for a political agreement that would set the stage for more formal cooperation. Until that is reached, CIWA's support will remain focused on technical 'track two' type cooperation.

**Horn of Africa:** Political progress in the Horn of Africa has created the space for deeper cooperation, including around transboundary water. CIWA support is growing rapidly, but at the same time there is a need to be both pragmatic about capacity and deliberate about a step-by-step process for scaling up support. At present five states – Djibouti, Eritrea, Ethiopia, Kenya, and Somalia – are in dialogue with each other and with the African Development Bank, European Union, and the World Bank about a program of large-scale regional investments. CIWA will be contributing to this process on issues related to transboundary surface and groundwater.

## Southern Africa

**Zambezi:** The project supporting the Zambezi Watercourse Commission (ZAMCOM) closed at the end of June 2019 with a Satisfactory rating and 100% disbursement. While CIWA has been in discussions with ZAMCOM about the possibility of a next stage of support, it is not yet clear that it will be of a scale that will justify a standalone project.

**Batoka Gorge:** CIWA support to the feasibility study and environmental and social impact assessment for the Batoka Gorge hydropower project ended at the end of December 2018. The Bank decided against another time extension and additional financing for the studies, and the studies are now being completed by the Zambezi River Authority using its own funds.

**Okavango:** The Okavango engagement is on hold and may be considered as part of a larger-scale approach.

### Next Steps – An Evolving Approach:

Drawing from the thinking in West Africa, in the short term CIWA will focus on developing a flexible 'Southern Africa' programmatic instrument where individual activities can be added or dropped as conditions on the ground dictate.

## Looking Ahead

Demand for CIWA's support remains high, and CIWA remains committed to supporting African institutions as they seek to address some of the most pressing issues on the continent. Water is critical to human welfare, economic growth, and environmental sustainability – and most water in Africa is shared across national boundaries.

While the need and demand for supporting transboundary water cooperation in Africa is clear, the best way to turn resources into results is often not. Africa has done well in creating collective institutions to manage collective water but less well in ensuring that these institutions have the political, human, and financial capital required to deliver on their mandate. This is not surprising: managing water resources domestically is a complex multi-stakeholder challenge, and adding multiple countries increases the complexity exponentially. In some cases, the challenge may be a chicken-or-egg question: do results mobilize resources, or do resources enable results? Or more practically, will member states properly resource a collective institution if they do not see tangible benefits from it? These are complex questions that our clients face, that CIWA needs to keep learning about, and where CIWA can help different institutions learn from each other.

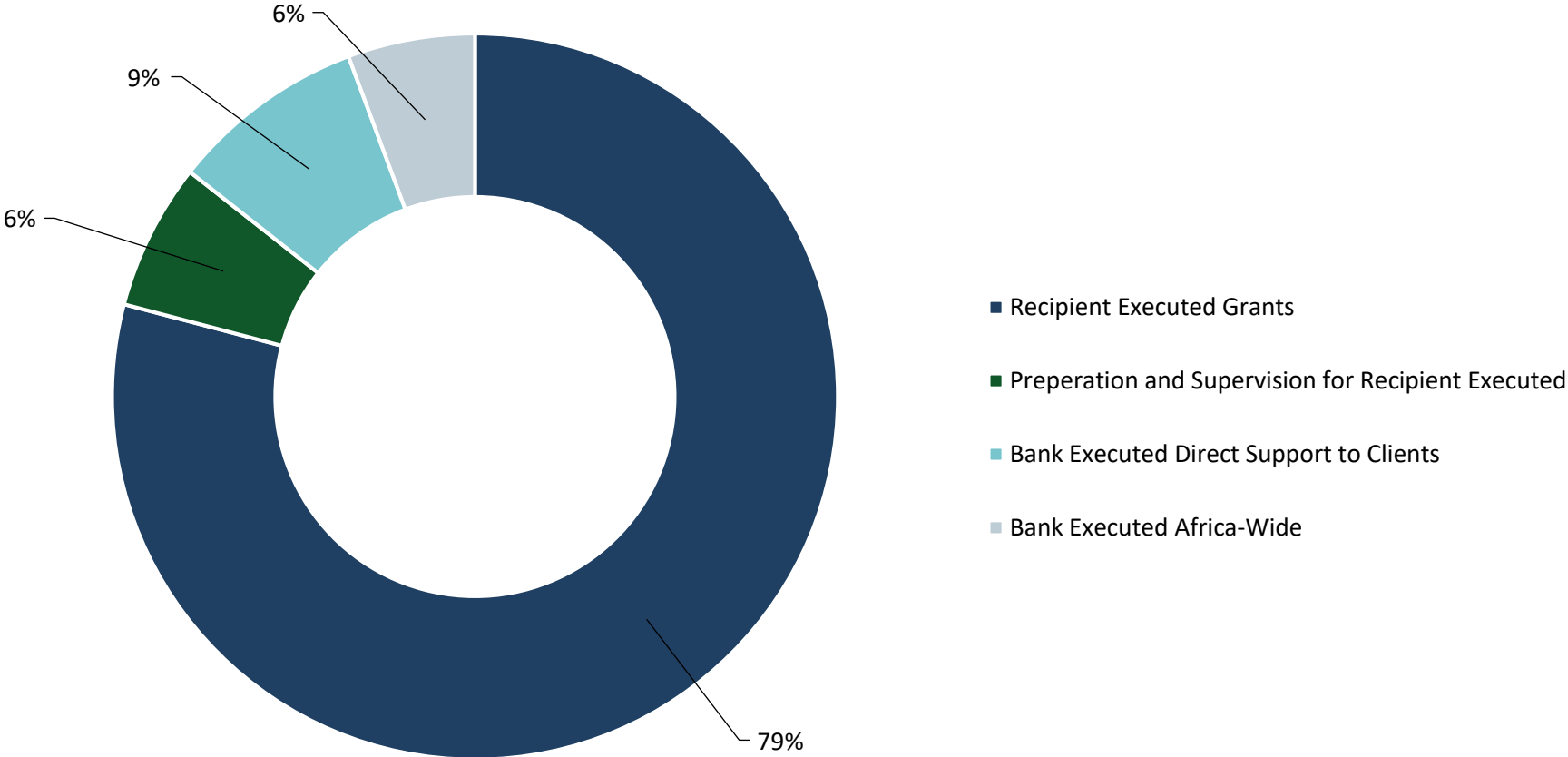
CIWA has supported multiple river basin institutions across Africa, but also Regional Economic Commissions, national governments on regional issues, and civil society networks. We have learned that one size does not fit all, and that step-by-step pragmatism by all stakeholders is required to build the trust, knowledge, and commitment required for mutual benefits. It is also clear that relatively small amounts of money can kickstart processes that will grow over time, such as CIWA's support on the Zambezi, which helped unlock cooperation that is bringing much larger benefits.

As we look ahead, CIWA will aim for a mix of continuity and change. CIWA's core strategy – combining long-term engagements in priority basins with shorter-term opportunistic investments, as well as working with a variety of stakeholders – remains robust. The need for increased focus on fragile situations and the potential for enabling more region-wide benefits from technology will require some change.

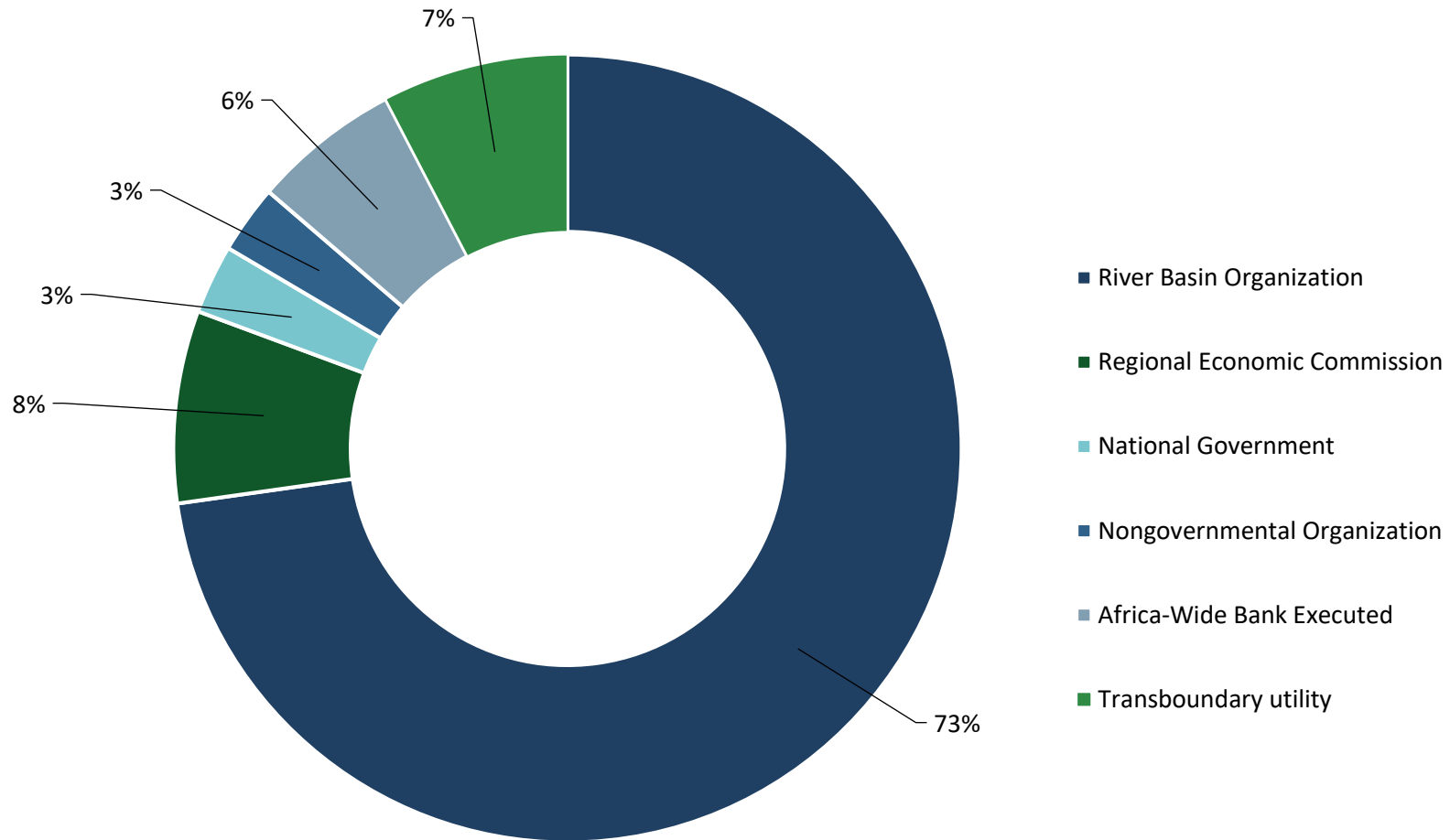
CIWA will be 10 years old in 2021, so the coming year is also an opportunity to reflect on what we have learned, to evaluate our impacts, and to set directions for the coming years.

# Annex A – Overview of Funding Allocations

Figure 1. Allocations by Grant Type



**Figure 2. Allocations by Partner Type**



**Figure 3. Allocations by Engagement**

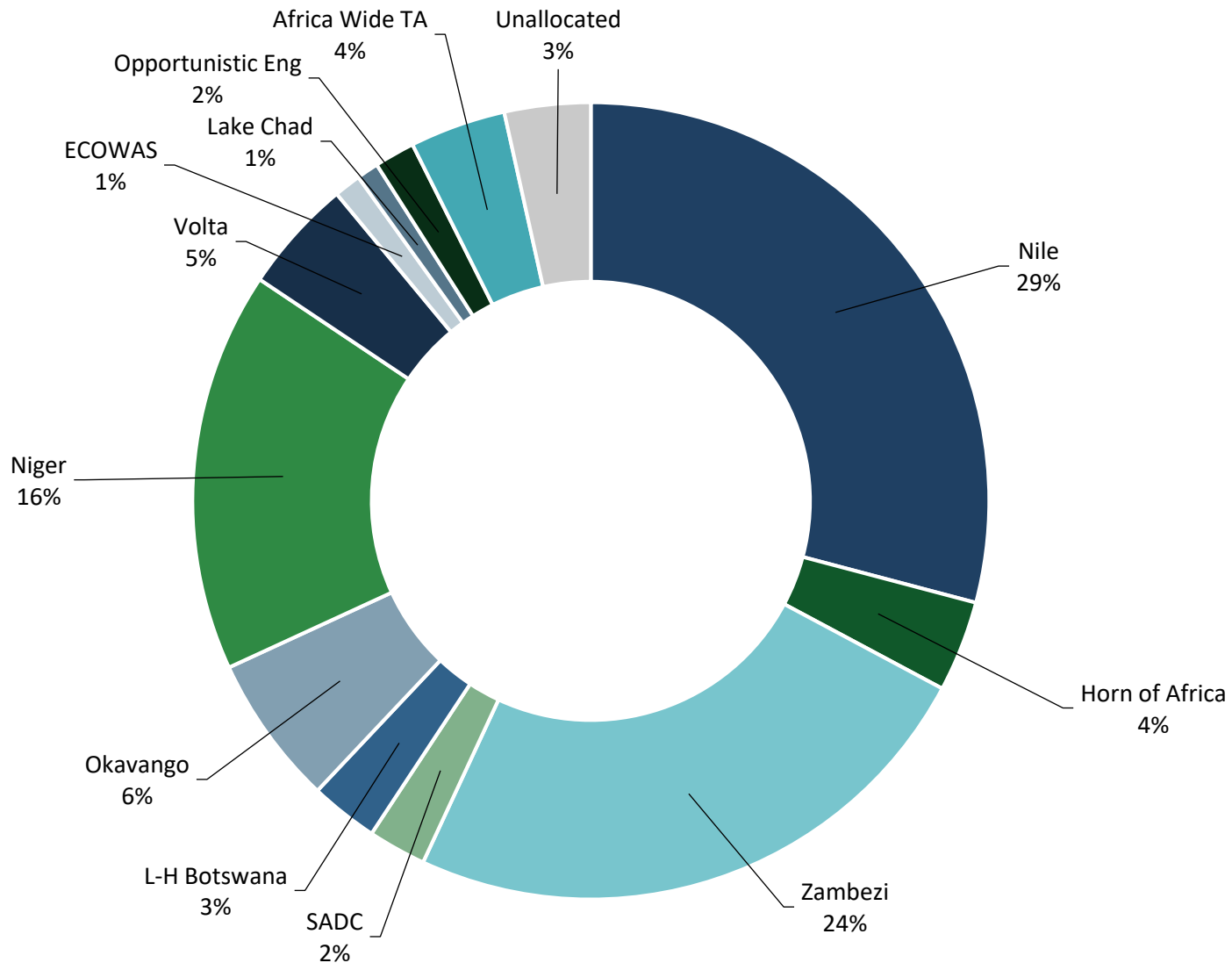
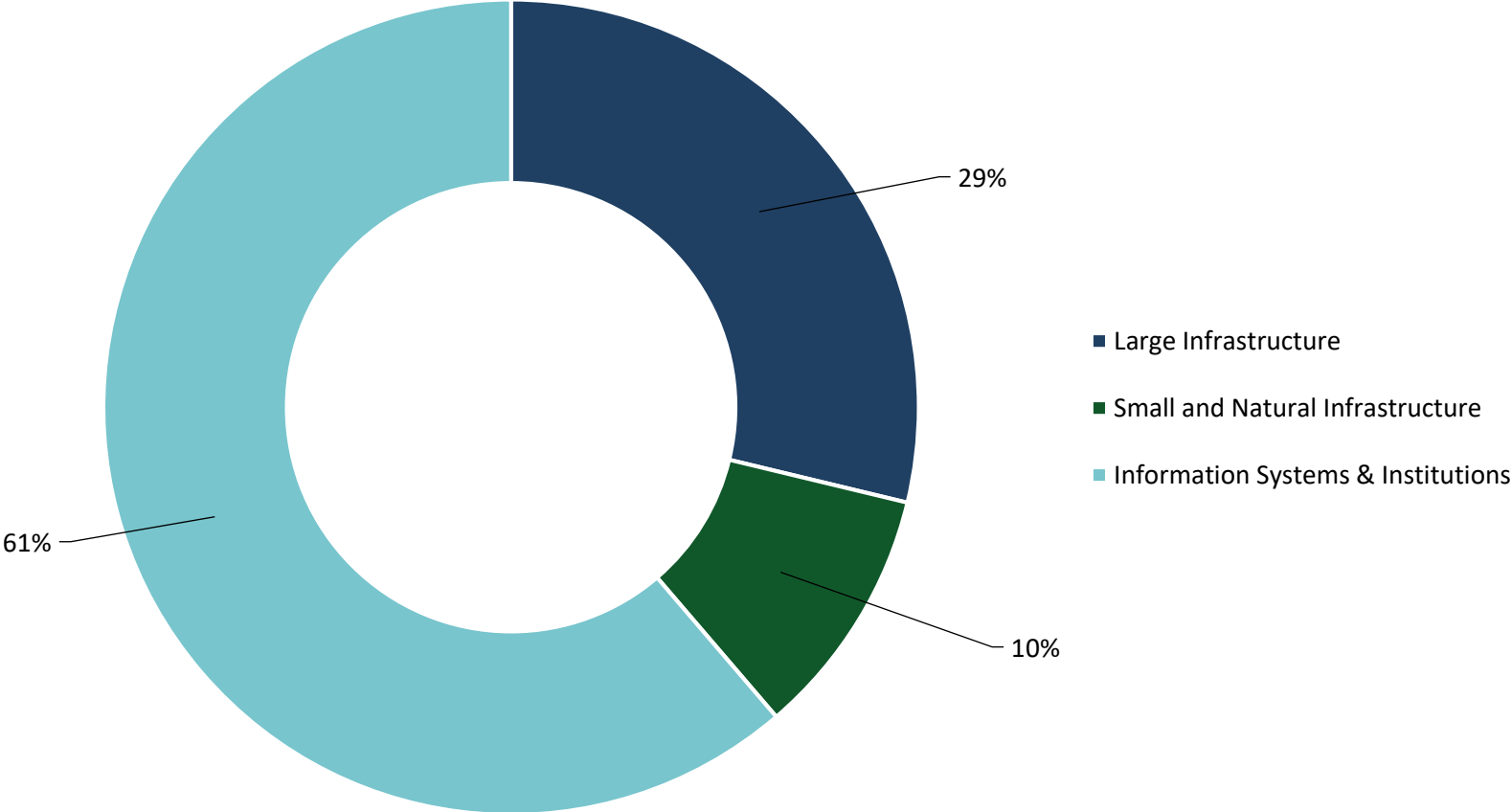


Figure 4. Allocations by Primary Outcome



# Annex B – Regional Engagements and Projects

## Digital Data Initiative

Transparently generated and trustworthy data about transboundary water resources is critical to transboundary cooperation. CIWA's three pillars of *Investment, Institutions, and Information* are generally implemented at the basin or sub-regional level. However, the nature of the current global technology and data revolution creates the potential for scaling-up some of CIWA's information related support across the whole region.

The technology and data revolution is driven by several underlying and related trends, including:

1. More and better **sensors** that are improving the quality and amount of data that can be collected. This includes, *inter-alia*, remote sensing-based on satellites or drones, mobile phone-based data collection, and small cheap automated sensors connected to the 'Internet of Things'.
2. Increased **access** as data is shifted to the cloud. The constraint in low-income or limited capacity areas becomes internet access rather than many, many computers with many, many local problems.
3. Data **integration** as more and more data are presented as 'feeds' of machine-readable data (via Application Processing Interfaces or APIs). One application may retrieve live data from multiple sources in multiple places to provide the user with a single integrated perspective.
4. Growing **computing power** as a shift to online processing means there is potentially a super-computer everywhere.
5. **Price** – more and more data are free, and more and more tools are open-source. In addition, technological innovation means that the cost of everything from sensors to services becomes more and more competitive.
6. The growth in the number of practical **applications** is increasing the understanding of a much broader set of people, which encourages investment in applications, which in turn increases the broader understanding.

This combination of factors creates huge opportunities for improving data about water resources, and particularly for transboundary basins, where building a reasonable picture of shared water resources becomes much easier. However, the challenge is the size of the gap between the *potential* of these tools and the actual *use* of these tools.

The digital data challenge, as discussed at the 2018 CIWA Advisory Committee meeting, is how to move beyond a 'retail' project-by-project approach and toward a more 'wholesale' or regional approach. CIWA committed to explore how best this might be done, including through partnerships. This would build on the experience that CIWA has already gained in supporting remote sensing applications in the Lake Chad, Niger, and Nile basins.

## FY19 Progress and Observations

During FY19 CIWA started the development of partnerships with:

- The African Minister's Council on Water (AMCOW), with a focus on building awareness among governments;
- The African Network of Basin Organizations (ANBO) with a focus on helping member basin organizations articulate their needs and apply solutions;
- The Digital Earth Africa initiative and the Global Partnership for Sustainable Development Data, with a focus on a regional data cube for Africa; and,



- The International Water Management Institute, with a focus on remote sensing-based water accounting.

At the basin level CIWA is exploring applications of remote sensing-based water accounting with Nile Basin Initiative (NBI) and dam optimization with the Zambezi Dam Owners Joint Technical Operations Committee. These applications are starting from the beginning with a view to scaling-up the methodology and tools beyond the initial client as rapidly as possible.

## Horn of Africa

CIWA has a fast-growing portfolio in the Horn of Africa that includes a regional groundwater initiative to be implemented by the Intergovernmental Authority on Development (IGAD) as well as technical assistance for Somalia on transboundary water resource management. During FY2019 the ground water initiative was approved, while the Somalia work advanced quickly.

### Regional Groundwater Initiative

The objective of the Horn of Africa Groundwater Initiative (P169078) is to support selected IGAD countries prepare for the development and management of groundwater through strengthening knowledge systems, building country and IGAD capacity, and assessing the feasibility of specific investments. Groundwater is a vital – and often the only – water resource available to many of the poorest people across the Horn. The sustainable development and management of groundwater is therefore vital to poverty reduction and to strengthen resilience of the inhabitants of the region against climate extremes.

### FY19 Progress and Observations

During FY19 the project was prepared and approved. The project will strengthen the knowledge and analytical foundation for sustainable development of groundwater resources in the greater Horn of Africa region and supports transboundary cooperation for its management. The project will (i) building on related work, support the compilation of groundwater information from existing regional and in-country studies (including gray literature) into a regional knowledge base to identify opportunities for investments creating economic growth; (ii) conduct a regional hydrological assessment of the surface and renewable groundwater potential, considering their spatial and temporal variability, as a basis for investments aiming at building resilience against climate variability (iii) building on the regional knowledge work, the project will conduct a case study at the level of a river basin, integrating all knowledge on surface and groundwater potential to create shared understanding of the opportunities, risks, costs, and benefits of cooperative development and management of international waters among stakeholders; (iv) strengthen the capacity of IGAD Water Unit to support regional cooperation on groundwater management and enhance the capacity of IGAD's Climate Prediction and Application Centre (ICPAC) in the area of groundwater data management and assessments.

Project implementation is underway. Two important activities – the preparation of terms of reference for feasibility studies (and associated environmental and social impact assessments) of Mt. Elgon, Merti, and Bagara Aquifers — are largely complete and procurement will be launched in October 2019.

### Somalia Transboundary Water Resources Management

The objective of the Somalia: Support to Transboundary Water Resources Management project (P167749) is to provide technical assistance to the Federal Government of Somalia (FGS) to articulate its water resources development options for the Juba and Shebelle basins, as well as to structure its

transboundary agenda and explore and use the appropriate avenues to pursue dialogue. This initial phase is Bank-executed, with the intention of moving to a recipient-executed approach once the foundations are in place.

The Bank-executed phase finances a senior technical advisor as well as a variety of capacity building activities. Initially the focus is on the assessment of the existing situation and identifying practical steps forward for shared water resources management, as well as data and information needs.

The first component, as part of the capacity building for the government of Somalia (particularly to Ministry of Energy and Water Resources), is supporting a number of meetings and consultations between the federal government and member states, as well as support different modules of short- and medium-term 'on the job' and external training for staff.

The second component supports the FGS to explore dialogue with its neighbors on transboundary waters, including:

- Consultative meetings between technical staff from the relevant countries
- Trust-building, experience-sharing and learning events for technical staff from the relevant countries as part of technical meetings, or as separate events
- Supporting the participation of officials and experts from the relevant countries at regional meetings and learning events

Learning and experience gaining sessions are ongoing (Kazakhstan Astana 9–12 October 2018, Geneva September 3-4, 2019), and the preparation of several water resources related concept notes project proposals in underway.

The FGS has established a multi-agency transboundary team under the Office of the President to provide a coordinated approach to exploring transboundary dialogue, and there is strong demand from the FGS to expand the original support. This includes a request for support to develop a broader water resources model for Somalia, as well as to contribute to the preparation of a National Water Strategy for Somalia. Given the centrality of the Juba and Shebelle river systems to Somalia's water resources (they are the only two perennial rivers in Somalia), this broader 'integrated water resource management' approach makes technical sense. Following discussions with management and CIWA donors, CIWA is currently expanding this program

### Looking Forward

Political progress in the Horn of Africa has created the space for deeper cooperation, including around transboundary water. CIWA support is growing rapidly, but at the same time there is a need to be both pragmatic about capacity and deliberate about a step-by-step process for scaling-up support. At present five states – Djibouti, Eritrea, Ethiopia, Kenya and Somalia – are in dialogue with each other and with the African Development Bank, European Union and the World Bank about a program of large-scale regional investments. CIWA will be contributing to this process on issues related to transboundary surface and groundwater to ensure that there are feasible and sustainable opportunities for regional investment in water resources across the Horn.

## Niger

The objective of the Niger River Basin Project (P149714) is to **strengthen the institutional framework for regional cooperation in water resources in the Niger River Basin**. The project has two components: supporting the Niger Basin Authority (NBA) to sustainably deliver its mandate and facilitating evidence-based decision-making for large transboundary infrastructure in the Niger Basin.

### FY19 Progress and Observations

Efforts to **strengthen the institutional and organizational systems** of NBA have been ongoing. The Bank-executed complementary institutional analysis, which started in April 2018 with a participatory self-assessment exercise, was completed in April 2019. It was presented by the NBA Executive Secretary during a round trip to the Ministers of the nine member countries in June and July 2019 to sensitize them in view of the Summit of Heads of State to be held in Conakry in October 2019. Key measures proposed and advocated are: (a) increased transparency of NBA budgetary management through a direct reporting mechanism to the Council of Ministers; (b) the NBA's water-related functions are confirmed as pivotal (c) the NBA will strengthen its capacity to assist countries in the development of dams while mainstreaming the equitable water sharing, prior notice principles as well as consideration for environmental and social issues.

One of the project objectives was a **complementary financing mechanism** endorsed by member states. Restructuring of the project in June 2018 changed this to a complementary financing mechanism endorsed by a Technical Committee of the Council of Ministers. The actual setup of the sustainable financing mechanism for the NBA is not an objective of this project but would be supported under future engagements. An initial proposal to enhance the NBA's financial autonomy based on a hydropower levy has been produced in May 2019 by a consultant and discussed. The legal and institutional feasibility are being examined. This will be presented and discussed by a technical committee in October 2019.

Three high level consultants were hired in February 2019 and have been working on a **methodology for decision-making on large transboundary infrastructure**. They have produced an outline in June 2019. The Methodological Note will draw lessons from the actual difficulties encountered with past and current projects and suggest ways of improving future decision-making. The specific objectives are:

- Identify the main decisions to be taken in the planning of cross-border infrastructure projects, their preparation, implementation and operation, as well as the role of the main stakeholders involved.
- Give feedback on current and past practices on some key projects (including Fomi, Kandadji, Taoussa, Kainji and Sélingué).
- Propose a set of improvement areas based on the difficulties identified as expressed by stakeholders.
- Highlight the benefits for member countries generated by decisions taken in consultation within the basin and reinforce the role of the NBA in these decisions.

The **development of a model** of the Niger River Inner Delta to understand how the services provided by this major wetland's ecosystems respond to different inflow patterns is ongoing. Implementation of the model is underway following these principles:

- Verification and re-use of existing data on flows at existing hydrometric stations in the area
- Use of satellite products for consistent information on the entire area of study

- Correction of topography anomalies (bank levels, dikes, natural thresholds) based on the comparison of the results of the model and the remote observation of the flooded surfaces or water heights

The institutional complementary analysis included a specific group **stakeholder engagement** session dedicated to receiving feedback on the National Focal Structure representatives of the member countries as well as the regional coordination of users. The consultant also drafted and used an anonymous questionnaire to collect stakeholders' opinion and suggestions on the NBA performance and desired future.

## Nile

CIWA supports the NBI to help countries to develop water resources in a sustainable way to ensure win-win gains for all through various projects that facilitate cooperative activities, improve integrated water resources planning and management, and identify and prepare potential investments of regional significance.

### Nile Cooperation for Results (NCORE)

CIWA's Nile Cooperation for Results Project (P130694) supports the NBI in the preparation of multi-sectoral, upstream, and cooperative regional investments that includes a pipeline of \$6 billion in investments currently being advanced by the Nile countries. CIWA helps advance regional investments by creating feasibility and design studies, building data and models for international agreement decision support, and strengthening stakeholder participation. The NBI regional investment portfolio in the Nile Basin is projected to benefit over eight million people through improved watershed management, irrigation, electricity production, and water supply.

#### *FY19 Progress and Observations*

The NBI continued implementation of the first phase of a **basin-wide hydromet network**. The detailed design and implementation plan for the hydromet network was developed by the Nile-SEC in close collaboration with the countries. Between 2018 and 2021, over 50 hydrological monitoring stations in the Nile Basin will be rehabilitated, installed, and commissioned. The stations will provide real-time data on river flows, water levels, water quality, and sediment transport, as well as reservoir and lake levels. The NBI is also continuing discussions with national-level water resource management programs to ensure that the new hydromet stations identified under the plan are harmonized with and adopted by national plans.

The NBI continued to support the **Rusumo Falls Hydroelectric Project** under joint development by the Governments of the Republic of Burundi, Republic of Rwanda and United Republic of Tanzania. The Rusumo Falls dam will generate approximately 80 megawatts to be shared between the three countries. NBI and the Nile Basin Discourse (NBD) supported implementation of the Livelihood Restoration Program (LRP), aimed at developing alternative income generating activities, as well as the Local Area Development Program (LADP), covering the five districts surrounding the Rusumo project.

Regarding the Nile Equatorial Lakes investments, in the FY19 period the NBI completed the **feasibility and preparation studies** for Mara Valley and Ngono Multipurpose projects in Tanzania, Sio-Sango Water Resources Development project in Kenya, and the Kabuyanda Water Resources Development project in Uganda's Kagera Basin. The studies were handed over to partner countries and a roadmap has been agreed by the riparian countries on the preparation of Nile Equatorial Investment Program (NELIP).

As reported previously, Eastern Nile governments have prioritized four **watershed management projects** in Sudan and Ethiopia prepared by the NBI. This year the NBI undertook an evaluation of the success of various pilot livelihood-based integrated watershed management interventions to inform riparian-led scale up of select best and most viable practices and training practitioners on lessons learned. This Multi-Sectoral Investment Opportunity Analysis is the first attempt to aggregate all water investment plans in the Eastern Nile and analyze them in the context of all (measured) water availability, while factoring in climate change predicted alternative scenarios, therefore ultimately attempting to regionally optimize and prioritize investments. The reports: Watershed Management Impact Assessment for Scaling-up, Groundwater Availability and Conjunctive Use Assessment, and Irrigation System Performance Assessment and Options for Improvement were completed in FY19.

The **Flood Forecasting and Early Warning (FFEW)** system has regularly produced daily and weekly Forecast Reports for Lake Tana Floodplains (Ethiopia), Blue and Main Nile System (Sudan) and Baro Akobo Sabat floodplains in Gambella. The flood models built for FFEW has been improved through technical assistance on flood mapping using satellite images and historical flood maps. Current work includes: (i) near real-time flood mapping to be incorporated in the FFEW report and (ii) the use of satellite-based precipitation data to detect the flooded area on the ground and expanding trainings on the basics of flood mapping to the Nile Equatorial Lakes region.

The NBI has pioneered **dam safety** standardization in Sub-Saharan Africa and, in FY19, achieved adoption of its Reference Dam Safety Guideline and Regulatory Framework world-wide by the International Commission on Large Dams. In FY19, NCORE supported more than 200 planners, policy makers, dam owners, dam operators, academia, civil society representatives, and young professionals from Eastern Nile, as well as other African countries, to be trained in on-site dam safety assessments. Additionally, NCORE supported the development of dam safety guidelines and national dam safety departments in Ethiopia, Sudan, and South Sudan.

The **internship and young professionals mentoring programs** at the NBI have creating practical networks for Eastern Nile water resources professionals, enriching their technical base and enhancing national capacity. The programs facilitated collaborations among Egyptian, Ethiopian, South Sudanese and Sudanese Universities, increased the visibility of NBI. Since the programs began in 2011 the number of participants now exceeds 150 people, who took part in 12 cohorts. In total, ~ 20% are of participants have been women (over 50% of the 46 Sudanese participants were women!), a ratio that far exceeds the ratio of women to men hydrologists in the region.

### **Nile Basin Discourse (NBD)**

The Engaging Civil Society for Social and Climate Resilience in the Nile Basin Project (P132448) supports the Nile Basin Discourse in providing a platform for citizen engagement in Nile Basin investment decisions and riparian dialogue, promotes awareness of the benefits of Nile Basin cooperation, and contributes to climate-resilient growth in the region.

### *FY19 Progress and Observations*

The NBD has continued to use its **outreach to civil society organizations** primarily through its website. User-generated content received from each country National Technical Support Expert has ensured that topical issues are shared with the basin countries. The issues and contents of submissions covered several topics that indicated resilience to climate change including protection of the environment through tree planting, women's rights, engagement of youth in waste management, challenges and

opportunities of water hyacinth on the Nile waters, climate change impacts and mitigation/adaptation measures, etc.

The NBD launched its 2018-2022 **strategy and financial sustainability** development process in February 2017. The final strategy incorporating all the comments of key stakeholders was submitted to the NBD Secretariat in August 2018.

The strategy was pivotal in the resource mobilization that led to NBD being one of the co-partners with IHE-Delft Seed Funding by Coca-Cola. “Women and Water in Communities for Change”, grant Seed Funding (SF) from the Coca-Cola Foundation was received to implement activities running in the period of 20 months, September 2017-August 2019. In this case, groups of women and youth from the Mabamba Bay wetlands (Uganda) and Mara River wetlands (Tanzania) funded by the SF, participated in a CIWA-funded capacity building training on climate change resilience and entrepreneurship for women and youth. As a result, the capacity building has led to the formation of the Mara Mori Catchment Forum (MAMOCAF), which has been identified as a grassroots action for NBD. MAMOCAF has been established as a new platform to engage stakeholders in the catchment management process, an activity for which NBD is mandated.

Based on the experience with the CIWA-funded project, NBD was invited by The Friedrich-Ebert-Stiftung, Kenya Office in cooperation with the Pan African Climate Justice Alliance (PACJA) and the Stockholm International Peace Research Institute (SIPRI) to contribute to the “First Horn of Africa Climate Security Working Group workshop”. The **knowledge-sharing** workshop took place in Nairobi, May 2019. The May 2019 working group unpacked the complexity of conflict and its relationship with climate change – how conflicts transcend borders and generally how the two issues can be weaved together and to identify necessary, comprehensive and potentially complementary regional mechanisms on different levels to address climate change related conflicts in the Horn of Africa.

NBD is a member of the Hydropower Congress Council, through the International Hydropower Association. On this basis, NBD was invited as a panelist to the World Hydropower Congress May 2019 on the topic “River basin development: Understanding connectivity, cumulative impacts and improved trade-offs”. The objectives were to discuss the upstream and downstream effects of hydropower facilities’ operational schemes and how cumulative impacts influence decision-making. At these panel discussions NBD shared the experience and lessons learned on multipurpose investment projects that entail hydropower. Project beneficiaries get affected by climate change, conflicts and end up migrating, which affects implementation plans. Leadership competency strengthening for the Secretariat commenced in May 2019 and will be continued in FY20.

**Stakeholder engagement** with transboundary communities on the Lakes Edward and Albert Integrated Fisheries and Water Resources Management (LEAF-II) Project was organized in December 2018 by the NBD in collaboration with the Uganda and D.R. Congo National Discourse Forums. The platform created awareness and an opportunity for the project beneficiaries and stakeholders to learn about the project’s transboundary benefits, successes, and challenges to date. For purposes of monitoring the results of the platform, a declaration was issued and published on the NBD’s website.

The Transboundary Stakeholders’ Consultation platform on the Baro-Akobo-Sobat (BAS) Multi-Purpose Water Resources Development and Management Project was organized in December 2018 by NBD in collaboration with the Ethiopia and South Sudan National Discourse Forums. The objective was to

facilitate a transboundary platform of engagement for sharing experience, learning and understanding the stakes and responsibility in the BAS project. Awareness was created at the platform on hydropower potentials of the BAS basin, the BAS projects design and status, the BAS multipurpose water resource development feasibility study, the communities' engagements on the BAS project, and the appropriate stakeholder engagement modalities in development interventions in transboundary waters.

## SADC

The objective of the Sustainable Groundwater Management in Southern African Development Community (SADC) Member States Project for Africa (P127086) is to support sustainable management of groundwater at national and transboundary levels across SADC Member States. The project has four components:

1. Operationalizing the SADC Groundwater Management Institute (GMI)
2. Strengthening institutional capacity for the sustainable management of groundwater in SADC countries
3. Advancing knowledge on transboundary and national groundwater
4. Promoting groundwater infrastructure management and development

## FY19 Progress and Observations

The SADC region is affected by climate change in part by repeated and protracted droughts, impacting food security, energy production, access to water for domestic and other productive uses, and ecological services. **Improving knowledge and understanding** of national and transboundary aquifers is essential to improve sustainable conjunctive use of surface and ground water. The SADC project is working to better understand transboundary aquifers (TBAs) in the SADC region. So far only three out of 30 have been comprehensively studied in order to understand their full groundwater potential especially at transboundary level. FY19 saw the beginning of implementation of the Shire Transboundary River/Aquifer system project to identify and develop joint strategic conjunctive management of the shared surface and groundwater resources – a project in accordance with the SADC Soil and Groundwater Management Plan. SADC-GMI will need to access additional funds in order to undertake more studies of the TBAs to generate readily available decision-making information for regional policymakers to help address the impacts of climate change.

Demonstrating itself as a **strong institution** well-placed to address groundwater issues in the region, this year SADC-GMI completed, began, or continued ongoing projects with several organizations or RBOs in the region:

- Jointly, with the AU/Nepad Southern African Network for Water Centres of Excellence (SANWATCE) and the Institute for Groundwater Studies, SADC-GMI organized the second SADC Groundwater Conference, held September 4-6, 2018.
- SADC-GMI is working with Water Research Commission to implement the SADC Transboundary Water Cooperation Big Data Analytics pilot project also funded by RSA Department of Science & Technology and USAID and involving USGS, Sustainable Water Partnership, Winrock and IBM. The project is currently ongoing until December of 2020.
- SADC-GMI is collaborating with SANWATCE on the EU supported Water and Cooperation within the Zambezi River Basin (WACOZA) until May 2020.

- With the Africa Groundwater Network (AGW-Net), SADC-GMI delivered training on integration of groundwater in RBOs training in Lusaka and Pretoria in July '18 and Nov '18 respectively. Together, the two organizations are preparing the delivery of a borehole drilling supervision training (in collaboration with UNICEF) in Zimbabwe for delivery in early 2020 and organizing the roll-out of training on integration of groundwater in RBOs for Francophone countries (in collaboration with BGR & UNESCO-IHP) for delivery in early 2020.
- Notably, in December 2018, SADC-GMI and LIMCOM signed a Memorandum of Understanding for collaboration on groundwater issues in the Limpopo River Basin.

Also, in FY19, SADC-GMI participated with USAID Southern Africa and the South African Department of Science and Technology 'Big Data Analytics and Transboundary Groundwater in Southern Africa: Capacity Building and Research Collaborations.' Some preliminary results of this collaboration were presented in a special session at the second SADC Groundwater Conference held in September 2018, which included oral presentations and a panel discussion.

SADC-GMI is currently implementing the SADC Groundwater DataCoM) project, for which two young professionals from each SADC Member State are participating. In November 2018, SADC-GMI hosted the group of young professionals for five days of training and workshops. The training involved the 26 Young Professionals who, among other things, presented their final assignments for peer review by their colleagues. Part of the work done by the young professionals contributed to the content of the SADC Framework for Data Collection and Management produced in May 2019. As part of advocacy, the Executive Summary of the framework was submitted to the SADC Water Ministers' meeting also held in May 2019.

### Investments Influenced

The background work of preparing technical and informational material supported by CIWA is directly informing the development and implementation of ten small grant projects worth a total of US\$ 1.5 million. These investments will benefit an estimated 5,000 people through improved access to water resources.

### Looking Forward

The project is destined to end on 31 December 2020. As of now, disbursements stand at about 81% and commitments are more than 90% on the full grant of \$10.2 million and physical progress on all project components is impressive. Based on the success of this current project, there is an opportunity to scale up the successes achieved so far by expanding the scope of activities to make the role of groundwater an integral part of improving water security in the SADC region, especially in the wake of the negative impacts of climate change.

Proposed ideas under discussion for a new project phase include the following:

- A. Institutional strengthening of SADC-GMI as a Centre of Excellence through implementation of the Financial Sustainability Plan
- B. Operationalization of the Enabling Policy, Legal & Institutional Environment for Groundwater Management in SADC Region plan, including national and regional institutional capacity building and enhancing groundwater governance
- C. Knowledge management and professional skills development
- D. Knowledge generation through research to characterize and understand aquifers in the region



- E. Promoting groundwater infrastructure development in member states through sub-grant scheme

## Volta

The objective of the Volta River Basin Strategic Action Programme Implementation (P149969) was to improve the capacity of the Volta Basin Authority (VBA) for transboundary water resources management.

### FY19 Progress and Observations

CIWA financing provided to the VBA allowed preparation of several investments (feasibility studies and detailed engineering design completed) for watershed restoration, riverbank protection, and sustainable livelihoods, which would benefit at least 6000 people in local communities upon implementation. These investments (totaling almost \$7 million) intended to provide basin-wide, cross-boundary benefits in the six basin countries (Benin, Burkina Faso, Cote d' Ivoire, Ghana, Mali, and Togo), by improving water quality, flow regulation, ecosystem improvements, and development of sustainable livelihood activities. While these investments could not be advanced, the project successfully provided training in FY19 on environmental science and capacity building for 200 Civil Society Organizations from six countries in the project area. It also brought together ~100 participants from key strategic partners in the Organization of the Stakeholders' Forum in April 2019.

A key achievement of ABV in FY19 is the validation of the Volta Water Charter, and its subsequent endorsement by the Council of Ministers in May 2019. National workshops were subsequently organized for increasing the awareness on the Water Charter. ABV's achievement in this component exceeded the project target.

The CIWA-supported diagnostic of the communications of VBA, begun in 2017, was also completed in FY19, with the creation and full adoption of their Communications Strategy and Plan. It defines key stakeholders, messages, channels, and tools and establishes guidelines for a platform for exchanging information and harmonized data among stakeholders to communicate the basin's needs, resources, and trends under a changing climate. CIWA has supported the VBA to help share studies and knowledge products ranging from regional planning documents to more technical studies on water resources management, climate risks, and water economic infrastructure in the region, both through an improved VBA website and through direct interactions and participation in other international workshops.

The project closed at the end of August 2019, and since the Volta is no longer one of CIWA's priority basins, there are no immediate plans for a follow-up activity.

## Zambezi

The Zambezi basin is one of CIWA's 'priority basins' and CIWA has been supporting the Zambezi River Commission (ZAMCOM), the Zambezi Basin Authority (ZRA), as well as some Bank-executed analytic work. The last financial year saw much of this work being completed.

The Zambezi is potentially one of the most effected basins by **climate change** in Africa. A World Bank managed study analyzed possible changes in precipitation and runoff due to climate change for the Zambezi, with a focus on the risks for the Batoka Gorge scheme. Risks could include upstream land-use changes and water abstractions, energy price fluctuations, and differing development scenarios.

Extreme flood and drought were also considered as performance risks as their likelihood increases as the climate changes. The study was completed in 2019.

### **Zambezi River Basin Management Project**

The Zambezi River Basin Management Project (US\$4 million, implemented by ZAMCOM) supported **strategic basin planning, decision support systems, and institutional strengthening** activities. These activities have been completed during 2019 and ZAMCOM now has a clear plan, better data and decision-making tools, as well as policy options on how to operationalize and advance the transboundary water resources development and management agenda of the Zambezi basin's countries.

The Strategic Plan has been prepared with two planning horizons: (i) Short term 2018 -2027 and (ii) medium-term 2028 – 2040. The Infrastructure Investment Component has four programs comprising national and transboundary projects including: a) hydropower; b) agricultural water; c) water supply services and d) catchment and natural asset management. The strategy proposes projects in these four areas totaling to USD28.2M

The legal studies supported under this project have been approved by the ZAMCOM Technical Committee and will be used to shape future institutional arrangements for infrastructure development across the Zambezi basin and the SADC region more broadly.

### **Zambezi River Basin Development Project**

The US\$6 million Zambezi River Basin Development Project supported **infrastructure development preparation**, including detailed feasibility, environmental, and social studies, as well as transaction advisory services for the Batoka Gorge hydropower project. The 2,400MW project is on the Zambezi river upstream of Kariba. The grant recipient was the Zambezi River Authority (ZRA), a bi-lateral organization established by Zambia and Zimbabwe with responsibility for development of the shared sections of the Zambezi River between the two countries as well as for the management and operation of the Kariba Dam.

The project was impacted by several technical, capacity and scope of works changes that had led to three project extensions and the need for additional financing. Additional contract costs arose from four factors: a) some changes in scope required as the technical work has progressed; b) more and more intensive meeting and consultation schedule for the consultants compared to what had been anticipated; c) delays in project implementation derived from decision-making procedures inherent to the bi-national client; and d) appointment of the African Development Bank (AfDB) as the lead financial arranger, which meant that the AfDB needed to take on some of the transaction advisory work being supported by the project and necessitated a change to this project's scope.

In late 2018 the two governments formally decided to adopt a Build, Operate and Transfer approach for the Batoka Gorge scheme in order to accelerate its development. In their formal notification to the Bank, the two governments noted that this represented a departure from the previous plan to publicly finance the dam and privately finance the two power stations via Special Purpose Vehicles, but that these changes were necessary given changes to their prevailing economic conditions, including the negative impacts of importing electricity on the balance sheets of the two energy utilities.

Together, these changes represented a significant departure in the overall approach originally envisaged under this project, and thus made it difficult to proceed with additional financing. The studies have continued with the same firms and under the same terms of reference, which ZRA have financed themselves. Final drafts of all studies were complete by September 2019, and they will be publicly disclosed upon finalization.

**The Bank's formal self-assessment rated the project as 'Moderately Satisfactory' at close – recognizing that the objectives of the project were being met but with considerable delays.**

## Annex C – Quantitative Results and Results Framework

Table 1 lists the potential investment projects influenced by the program where preparation studies enable estimations of investment values and project beneficiaries. Table 2 lists those investment projects influenced by CIWA that have thus far mobilized resources. Depending on the project, and on the cooperation status of the specific basin, CIWA’s influence on investments and beneficiaries can vary.

**Table 1. Potential Investments Influenced by CIWA**

Potential Investments	CIWA’s Role	Estimated Current Investment Value (US\$ Billions)	Estimated Number Of Potential Beneficiaries (Millions)	Anticipated Benefits
Nile Basin Investments	Support for NBI to facilitate cooperative activities such as improved IWRPM, and the identification and preparation of regionally significant cooperative investments	7.6	8.8	Increased water supply, increased power generation, improved watershed management, irrigation development
Lesotho Highlands-Botswana Water Transfer	Financing study to explore costs and benefits of water transfer and incentivize cooperation	0.8	2	Increased water supply, additional revenues
Cubango-Okavango Livelihood Enhancement Program	Support for the Multi-Sector Investment Opportunities Analysis used to develop long-term investment and livelihood improvement programs. Ongoing support for developing the next phase following MSIOA	0.9	Not yet available	Increased income, access to water, sanitation and sustainable energy, actions to address hunger and disease, and promotion of gender equality, education and environmental sustainability

Luapula Sub-basin Investments	Exploring potential cooperative legal and institutional arrangements for a future Luapula River Authority	1.9	Not yet available	Increased power generation
Volta Basin Investments	CIWA financing provided to the Volta Basin Authority through P149969 allowed preparation of a number of investments (feasibility studies and detailed engineering design) for watershed restoration, river bank protection, and sustainable livelihoods	0.007	0.006	These investments will provide basin-wide, cross-boundary benefits in the six basin countries, by improving water quality, flow regulation, ecosystem improvements, and development of sustainable livelihood activities. At least 6000 people are expected to benefit from these activities
<b>TOTAL</b>		<b>11.2</b>	<b>10.8</b>	

**Table 2. Mobilized Investments Influenced by CIWA**

<b>Mobilized Investments</b>	<b>CIWA's Role</b>	<b>Estimated Current Investment Value (US\$ Billions)</b>	<b>Estimated Number Of Direct Beneficiaries (Millions)</b>	<b>Benefits</b>
Niger Basin Climate Resilience Investment Project	Conducted technical and political consultations to develop investment plan	0.2	4.0	Rural livelihoods, early warning and climate information systems, climate resilience
Kandadji Dam	Supported analytical study of resettlement best practices	1.0	1.0	Increased Power generation, irrigation development, job creation

Kariba Dam	Produced studies on rehabilitation of the Dam which led to decision to invest in safety and reliability improvements	0.294	3.0	Increased power generation, reduced risk, and avoided disaster
Batoka Gorge HES	Analysis of financial implications of the investment and facilitated negotiations to review findings and encourage renewal of project. Additional engineering studies and investment preparation	4	6.0	Increased power generation
Lake Chad Recovery Project (building on the Lake Chad Development and Climate Resilience Action Plan)	Support for development of Action Plan to execute the investments within Climate Resilience project	0.165	Not yet available	Rural livelihoods, climate resilience
The Multinational Lakes Edward and Albert Integrated Fisheries and Water Resources Management Project	Support for the Nile Basin Discourse to prepare this scale-up of an earlier pilot project with a focus on participatory and conflict sensitive consultations and bi-lateral cooperation	0.025	0.2	Rural livelihoods, fisheries, ecosystem management
Rusumo Falls Hydroelectric Scheme	Supported implementation and mapping of resettlement development plan	0.34	1.4	Increased power generation
Nyimur and Kabuyanda Multi-purpose	Supported Nile Basin Discourse to ensure stakeholder engagement	0.18	0.5	Improved irrigation, hydroelectric and municipal use

Regional Hydromet	Institutional support for Nile Basin Initiative design and implementation	0.005	0.000450	Improved hydrological and meteorological information
<b>TOTAL</b>		<b>6.2</b>	<b>16.1</b>	

## Program Development Objective (PDO)

To strengthen the cooperative management and development of international waters in Sub-Saharan Africa to facilitate sustainable climate-resilient growth.

**Indicator 1:** US dollar financing mobilized for cooperative management and development of international waters projects supported by CIWA

**FY19 Target:** US\$10 billion in potential projects influenced by CIWA.

**FY19 Actual:** US\$17.4 billion (US\$11.2 billion in potential investments influenced by CIWA; US\$ 6.2 billion in mobilized investments influenced by CIWA).

**Indicator 2:** Number of people directly benefiting from improved water resources management and development in target basins through projects supported by CIWA

**FY19 Target:** 40 million potential beneficiaries of projects influenced by CIWA.

**FY19 Actual:** 26.9 million (10.8 million potential beneficiaries of projects influenced by CIWA; 16.1 million direct beneficiaries of mobilized investments influenced by CIWA.)

## Intermediate Result 1. Regional Cooperation and Integration Strengthened

**Indicator 1:** Number of relevant transboundary institutions strengthened to improve regional cooperation

**FY19 Target:** Eight relevant institutions with projects or activities in operation<sup>1</sup>.

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<sup>1</sup> Following CIWA Results Framework methodology, Intermediate Result 1, Indicator 1 is reported as a cumulative total for interim reporting periods. The nine relevant institutions reported under FY18 actual achievement include projects that are legally closed.

**FY19 Actual:** Eleven relevant institutions – ECOWAS, IGAD, LCBC, NBA, NBI, NBD, OKACOM, SADC, VBA, ZAMCOM, ZRA, (eleven relevant institutions, including six basin authorities, three Regional Economic Commissions (RECs), one transboundary utility, and one civil society network) – have projects or activities in operation.

**Indicator 2:** Number of strategic analyses and knowledge products used to illustrate the evidence base for cooperation, needs, and challenges

**FY19 Target:** 20 strategic analyses conducted and used.

**FY19 Actual:** 36 strategic studies completed and used.

**In the FY19 period the SADC completed the** Guidelines for the Groundwater Development in the SADC Region, the Niger Basin project completed an institutional and organizational analysis of the NBA, four thematic papers were produced in the Zambezi project looking at a) economics and socio-economics; b) water resources; c) Ecosystems and land-use; and d) climate variability and change for the Basin, and the Nile project produced the analyses: Flood preparedness and early Warning Seasonal Monitoring in the Eastern Nile Basin, Watershed Management Impact Assessment for Scaling-up, Groundwater Availability and Conjunctive Use Assessment, and Irrigation System Performance Assessment and Options for Improvement.

**The following 26 strategic analyses were reported previously:**

- Three legal equivalence and harmonization studies were completed in the Zambezi River Basin
- The Okavango Multi-sector Investment Opportunity Analysis
- Climate Resilience in Africa: The role of cooperation around transboundary waters
- Fouta Djallon Water Atlas (ECOWAS)
- Sustainable Financing Mechanisms for the Mono Basin Authority (MBA)
- Volta Basin Authority Institutional Assessment
- Eastern Nile Multi-sector Investment Opportunity Analysis
- Lake Tanganyika Options Analysis
- Political Economy of Cooperation in International Waters in Africa
- Economic Rationale for Cooperation in International Waters in Africa
- An Institutional Assessment of Transboundary Watercourses in Africa
- Improved Access to Basin Data activity was also finalized, and produced important inputs to the Spatial Agent App, a publication titled “Spatial Data Primer and the CIWA Africa Atlas”
- Climate Change Assessment of the Energy-Water Nexus for the Zambezi Basin
- The assessment of the first phase of the Kandadji resettlement program



- Lake Chad Development and Climate Resilience Action Plan diagnostic
- Priority Needs for Lake Chad Basin Information Systems report
- Nile Cooperation: Opportunities and Challenges
- Nile Cooperation: Lessons for the World and Lessons from the World for the Nile Basin
- Four briefing papers on Nile cooperation 2024 scenarios
- Assessments of instruments and practices for conserving ecosystem services
- Good practices in gender mainstreaming in Nile Basin Initiative
- Quantification of benefits in transboundary water cooperation
- Eastern Nile Technical Regional Office published and disseminated a number of knowledge products including a watershed management field guide entitled “What have we brought back from China”
- Institutional Assessment of the Zambezi River Authority.

## Intermediate Result 2. Water Resources Management Strengthened

**Indicator:** Number of relevant transboundary institutions using improved analytical tools, knowledge products, data, forecasting, and/ or capacity for improved water and climate risk management or investment operation coordination

**FY19 Target:** Seven relevant institutions with projects in operation that improve water and climate risk management and/or investment operation coordination.

**FY19 Actual:** Eleven relevant institutions have projects in operation that contribute to strengthening water resources management. – ECOWAS, IGAD, LCBC, NBA, NBI, NBD, OKACOM, SADC, VBA, ZAMCOM, and ZRA, have/had projects in operation that contribute to strengthening water resources management.

## Intermediate Result 3. Water Resources Development Strengthened

**Indicator 1:** Number of investment opportunities with regional benefits that have been advanced through CIWA support

**FY19 Target:** 35 investment opportunities with regional benefits influenced by projects in operation.

**FY19 Actual:** 37 investment projects are being advanced by projects in operation (31 reported previously). NBA, NBI, VBA, ZRA, OKACOM, LCBC have projects in operation that contribute to advancing 37 investment opportunities. In the Volta River Basin, Mali, Togo, Benin, Burkina Faso, Cote d’Ivoire, Ghana

**Indicator 2:** Number of relevant transboundary institutions with an improved approach to sustainable investment planning and bankable investment preparation

**FY19 Target:** Five institutions with projects in operation that improve the approach to sustainable investment planning and bankable investment preparation.

**FY19 Actual:** Six institutions have relevant projects in operation. LCBC, NBA, NBI, ZAMCOM, ZRA, and now VBA, have projects in operation that contribute to improving the approach to sustainable investment planning and bankable investment preparation. In FY19 the VBA has developed a system of agreed Action Plans with focal point in national institution in each country, which allowed an efficient preparation of feasibility and detailed design studies for the six new proposed investments.

#### **Intermediate Result 4. Stakeholder Engagement and Coordination Strengthened**

**Indicator 1:** Number of basins with improved engagement of civil society, private sector and academia; Percentage of engagements where improved stakeholder engagement explicitly supports the incorporation of gender issues into the design and implementation of water management and development activities

**FY19 Target:** Five basins with projects or activities in operation, 50 percent of engagements explicitly support the incorporation of gender into the design and implementation of water management and development activities.

**FY19 Actual:** Seven basin institutions in five basins, plus one REC (NBA, NBI, NBD, OKACOM, SADC, VBA, ZRA, and ZAMCOM) have projects in operation that contribute to strengthening stakeholder engagement and coordination. The NBA, NBI, NBD, SADC, ZRA, and now the VBA, have explicit communication, stakeholder engagement, gender equality, and other strategies that aim to improve gender equality through mainstreaming women's empowerment into all water management, capacity building, training, and development activities.

**Indicator 2:** Number of basins with increased water resources management and development information in the public domain

**FY19 Target:** Five basins with increased information in the public domain.

**FY19 Actual:** In FY19 CIWA Five basins with increased information in the public domain. CIWA's engagements in the Nile, Niger, Lake Chad, Zambezi, and Volta basins have contributed to increased water resources management, climate data, and water development information in the public domain. In FY19, VBA's new communications plan ensured that all activities included an active dissemination effort. This put significant information into the public domain, through radio, television and print media. VBA is currently in the process of operationalizing its website as a primary portal for basin level information.

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[1] Total values and values for particular projects, such as the Nile Basin Investments, in Table 1 will change year on year in order to reflect the progress of investments as they move from potential to mobilized.

[2] Significant changes in the total Estimated Potential Investment Value and Estimated Number of Potential Direct Beneficiaries have occurred since the FY2017 largely due to the removal of the Fomi Dam project from Table 1. CIWA's objective with respect to the Fomi project was to improve the decision-making process. As the project is no longer moving forward as originally conceived, the project has been removed from Table 1.

## CIWA'S Results Framework and Monitoring

### IMPACT: Strengthen sustainable climate-resilient growth in Sub-Saharan Africa

Indicator	Target FY13	Target FY14	Target FY15	Target FY16	Target FY17	Target FY18	Target FY19	Target 2020
<b>Program Development Objective: To strengthen cooperative management and development of international waters in Sub-Saharan Africa to aid sustainable climate-resilient growth.</b>								
<b>i) US\$ investment finance for cooperative management and development of international water resources projects influenced by CIWA</b>	\$4 billion (value of potential projects influenced by CIWA)	\$6 billion (value of potential projects influenced by CIWA)	\$8 billion (value of potential projects influenced by CIWA)	\$8 billion (value of potential projects influenced by CIWA)	\$9 billion (value of potential projects influenced by CIWA)	\$9 billion (value of potential projects influenced by CIWA)	\$10 billion (value of potential projects influenced by CIWA)	US\$10 billion investment finance for cooperative management and development of international waters projects influenced by CIWA
<b>Baseline: \$0 billion (value of projects influenced by CIWA)</b>			\$1.3 billion mobilized investments influenced	\$4.3 billion mobilized investments influenced	\$5.0 billion mobilized investments influenced	\$6.4 billion mobilized investments influenced	\$6.2 billion mobilized investments influenced	

<b>ii) Number of people who will directly benefiting from improved water resources management and development in target basins through projects supported by CIWA</b>	6 million (potential direct beneficiaries of projects influenced by CIWA)	8 million (potential direct beneficiaries of projects influenced by CIWA)	10 million (potential direct beneficiaries of projects influenced by CIWA)	15 million (potential direct beneficiaries of projects influenced by CIWA)	20 million (potential direct beneficiaries of projects influenced by CIWA)	30 million (potential direct beneficiaries of projects influenced by CIWA)	40 million (potential direct beneficiaries of projects influenced by CIWA)	50 million people will directly benefit from improved water resources management and development projects influenced by CIWA
	FY13 Achievement: 13.2 million potential direct beneficiaries	FY14 Achievement: 46 million potential direct beneficiaries	FY15 Achievement: 43 million potential direct beneficiaries	FY16 Achievement: 37 million potential direct beneficiaries	FY17 Achievement: 41.2 million potential direct beneficiaries	FY18 Achievement: 4.7 million potential direct beneficiaries	FY19 Achievement: 10.8 million potential direct beneficiaries	
<b>Baseline: 0 people directly benefiting</b>			5.6 million direct beneficiaries of mobilized investments influenced	10.8 million direct beneficiaries of mobilized investments influence d	11.5 million direct beneficiaries of mobilized investments influenced	12.15 million direct beneficiaries of mobilized investments influenced	16.1million direct beneficiaries of mobilized investments influenced	

**Intermediate Result 1. Regional cooperation and integration strengthened**

<b>i) Number of relevant transboundary institutions strengthened to improve regional cooperation</b>	3 basin institutions with projects in operation that contribute to strengthening regional cooperation and integration	5 relevant institutions with projects or activities in operation	6 relevant institutions with projects or activities in operation	6 relevant institutions with projects or activities in operation	8 relevant institutions with projects or activities in operation	8 relevant institutions with projects or activities in operation	8 relevant institutions with projects or activities in operation	8 transboundary institutions in at least five basins have strengthened regional cooperation and integration
	FY13 Achievement: 3 basin institutions have contributing	FY14 Achievement: 5 relevant institutions with projects in operation	FY15 Achievement: 7 relevant institutions with projects in operation	FY16 Achievement: 8 relevant institutions with projects in operation	FY17 Achievement: 8 relevant institutions with projects in operation	FY18 Achievement: 9 relevant institutions with projects in operation	FY19 Achievement: 11 relevant institutions with projects in operation	
<b>Baseline: 0 institutions strengthened</b>								

projects in  
operation

<p><b>ii) Number of strategic analyses and knowledge products used to illustrate the evidence base for cooperation, needs, and challenges</b></p> <p><b>Baseline:0 strategic analyses conducted by CIWA</b></p>	<p>3 strategic analyses conducted</p> <p>FY14 target partially met: Many strategic analyses are underway, one is complete.</p>	<p>4 strategic analyses conducted</p> <p>FY15 target partially met: Many strategic analyses are underway, two are complete.</p>	<p>5 strategic analyses conducted</p> <p>FY16 Achievement: 16 strategic analyses conducted</p>	<p>18 strategic analyses conducted</p> <p>FY17 Achievement: 23 strategic analyses conducted</p>	<p>20 strategic analyses conducted and used</p> <p>FY18 Achievement: 26 strategic analyses conducted</p>	<p>20 strategic analyses conducted and used</p> <p>FY19 Achievement: 36 strategic analyses conducted and used</p>	<p>20* strategic analyses used to illustrate the evidence base for cooperation</p>
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**Intermediate Result 2. Water resources management strengthened**

<p><b>i) Number of relevant transboundary institutions using improved analytical tools, knowledge products, data, forecasting, and/or capacity for improved water and climate risk management or investment operation coordination</b></p> <p><b>Baseline: 0 institutions using tools, data and capacity improved with CIWA support</b></p>	<p>3 basin institutions with projects in operation that contribute to strengthening water resources management</p> <p>FY13 Achievement: 3 basin institutions have contributing projects in operation</p>	<p>4 relevant institutions with projects in operation that improve water and climate risk management and/or investment operation coordination</p> <p>FY14 Achievement: 5 relevant institutions have projects in operation that contribute to strengthening water resources management</p>	<p>5 relevant institutions with projects in operation that improve water and climate risk management and/or investment operation coordination</p> <p>FY15 Achievement: 5 relevant institutions have projects in operation that contribute to strengthening water resources management</p>	<p>5 relevant institutions with projects in operation that improve water and climate risk management and/or investment operation coordination</p> <p>FY16 Achievement: 7 relevant institutions have projects in operation that contribute to strengthening water resources management</p>	<p>7 relevant institutions with projects in operation that improve water and climate risk management and/or investment operation coordination</p> <p>FY17 Achievement: 8 relevant institutions have projects in operation that contribute to strengthening water resources management</p>	<p>7 relevant institutions with projects in operation that improve water and climate risk management and/or investment operation coordination</p> <p>FY18 Achievement: 9 relevant institutions have projects in operation that contribute to strengthening water resources management</p>	<p>7 relevant institutions with projects in operation that improve water and climate risk management and/or investment operation coordination</p> <p>FY19 Achievement: 11 relevant institutions have projects in operation that contribute to strengthening water resources management</p>	<p>7* institutions in at least four basins using improved analytic tools, knowledge products, data, forecasting, and/or capacity for improved water and climate risk management or investment operation coordination</p>
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**Intermediate Result 3. Water resources development strengthened**

<p><b>i) Number of investment opportunities with regional benefits that have been advanced through CIWA support</b></p> <p><b>Baseline: 0 investment opportunities with regional benefits advanced by CIWA</b></p>	<p>2 basin institutions with projects in operation</p> <p>FY13 Achievement: 2 basin institutions have contributing projects in operation</p>	<p>2 investment opportunities with regional benefits influenced by projects in operation</p> <p>FY14 Achievement: Multiple investment projects are being advanced by projects in operation.</p>	<p>4 investment opportunities with regional benefits influenced by projects in operation</p> <p>FY15 Achievement: 22 investment projects are being advanced by projects in operation.</p>	<p>6 investment opportunities with regional benefits influenced by projects in operation.</p> <p>FY16 Achievement: 31 investment projects are being advanced by projects in operation.</p>	<p>31 investment opportunities with regional benefits influenced by projects in operation.</p> <p>FY17 Achievement: 32 investment projects are being advanced by projects in operation.</p>	<p>35 investment opportunities with regional benefits influenced by projects in operation.</p> <p>FY18 Achievement: 31 investment projects are being advanced by projects in operation.</p>	<p>35 investment opportunities with regional benefits influenced by projects in operation.</p> <p>FY19 Achievement: 37 investment projects are being advanced by projects in operation.</p>	<p>35* investment opportunities with regional benefits that have been advanced through CIWA support.</p>
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<b>ii) Number of relevant transboundary institutions with an improved approach to sustainable investment planning and bankable investment preparation<sup>2</sup></b>	2 institutions with projects in operation that improve the approach to sustainable investment planning and bankable investment preparation	3 institutions with projects in operation that improve the approach to sustainable investment planning and bankable investment preparation	4 institutions with projects in operation that improve the approach to sustainable investment planning and bankable investment preparation	5 institutions with projects in operation that improve the approach to sustainable investment planning and bankable investment preparation	5 institutions with projects in operation that improve the approach to sustainable investment planning and bankable investment preparation	5 institutions with projects in operation that improve the approach to sustainable investment planning and bankable investment preparation	5 relevant transboundary institutions with an improved approach to sustainable investment planning and bankable investment preparation
<b>Baseline: 0 basins supported by CIWA</b>	FY14 Achievement: 2 institutions have relevant projects in operation	FY15 Achievement: 3 institutions have relevant projects in operation	FY16 Achievement: 5 institutions have relevant projects in operation	FY17 Achievement: 5 institutions and four national governments have relevant projects in operation	FY18 Achievement: 5 institutions and four national governments have relevant projects in operation	FY19 Achievement: 6 institutions and four national governments have relevant projects in operation	

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<sup>2</sup> Sustainable investment preparation includes consideration of poverty, gender, long-term climate change among other social and environmental considerations

**Intermediate Result 4. Stakeholder engagement and coordination strengthened**

<p><b>i) Number of basins with improved engagement with civil society, private sector and academia; percentage of percent with engagements where improved stakeholder engagement explicitly supports the incorporation of gender issues into the design and/or implementation of water management and development activities</b></p> <p><b>Baseline: 0 engagements with improved stakeholder engagement and incorporation of gender considerations</b></p>	<p>3 basin institutions with projects in operation that contribute to strengthening stakeholder engagement and coordination</p> <p>FY13 Achievement: 3 basin institutions have contributing projects in operation</p>	<p>3 basins with projects or activities in operation; 30 percent of which include organizations representing interests of women and/or the poor</p> <p>FY14 Achievement: 4 basin institutions have projects in operation that contribute to strengthening stakeholder engagement; only 25% of which have an explicit linkage with organizations representing the interests of women with projects or activities in operation</p>	<p>4 basins organizations representing interests of women and/or the poor</p> <p>FY15 Achievement: 5 basin institutions have projects in operation that contribute to strengthening stakeholder engagement; only 20% of which have an explicit linkage with organizations representing the interests of women</p>	<p>5 basins with projects or activities in operation; 50 percent of which include organizations representing interests of women and/or the poor</p> <p>FY16 Achievement: 5 basin institutions have projects in operation that contribute to strengthening stakeholder engagement; only 20% of which have an explicit linkage with organizations representing the interests of women</p>	<p>5 basins with projects or activities in operation; 50 percent of which include organizations representing interests of women and/or the poor</p> <p>FY17 Achievement: 7 basin institutions have projects in operation that contribute to strengthening stakeholder engagement; 50% explicitly supports incorporation of gender issues into design and implementation of the activity</p>	<p>5 basins with projects or activities in operation; 50 percent explicitly supports incorporation of gender issues into design and implementation of the activity</p> <p>FY18 Achievement: 7 basin institutions have projects in operation that contribute to strengthening stakeholder engagement; 50% explicitly supports incorporation of gender issues into design and implementation of the activity</p>	<p>5 basins with projects or activities in operation; 50 percent explicitly supports incorporation of gender issues into design and implementation of the activity</p> <p>FY19 Achievement: 7 basin institutions have projects in operation that contribute to strengthening stakeholder engagement; 50% explicitly supports incorporation of gender issues into design and implementation of the activity</p>	<p>5 basins with improved engagement with civil society, private sector and academia; 60 percent explicitly supports incorporation of gender issues into design and implementation of the activity</p>
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<b>ii) Number of basins with increased water resources management and development information in the public domain</b>  <b>Baseline: 0 basins</b>	1 basin with increased information in the public domain  FY14 Achievement: 1 basin has increased information in the public domain	2 basins with increased information in the public domain  FY15 Achievement: 1 basin has increased information in the public domain	3 basins with increased information in the public domain  FY16 Achievement: 4 basins have increased information in the public domain	4 basins with increased information in the public domain  FY17 Achievement: 4 basins have increased information in the public domain	4 basins with increased information in the public domain  FY18 Achievement: 4 basins have increased information in the public domain	5 basins with increased information in the public domain  FY19 Achievement:5 basins have increased information in the public domain	5 basins with increased information in the public domain
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## Annex D – Risk Analysis

Risk Description	Mitigation applied	Notable Status Updates
<p>1. Challenging political context. All work in international waters has an inherent risk that domestic or international political issues (related or unrelated to water issues) may negatively impact the context in which such projects operate, resulting in long-term delay or even failure of specific projects which could impact the success of the program. This risk is often beyond the scope or the influence of CIWA or of the partner organizations (RBO, REC, NGO, or of other regional organizations).</p>	<p>CIWA has a diversified portfolio geographically (programs in East, West, Central, and Southern Africa), in types of support (focus on strengthening information, institutions, and infrastructure), and in type of clients (RBOs, RECs, etc.). While the political context may be challenging for one type of work in a particular region, it may be less so for another type in another region. Portfolio diversification helps mitigate political risks at the program level.</p> <p>Based on its political economy study, political economy analyses are mainstreamed in CIWA program planning. Programs in the Horn of Africa, Nile, Niger, Okavango, Volta and Zambezi Basins are informed by political economy considerations, which help to better understand risks, design projects that balance ambition and risk, and formulate mitigation strategies that enable effective program implementation.</p>	<p>The political economy of the Nile region saw shifts in FY19 with significant changes in Ethiopia as well as Sudan. The changes in Ethiopia create the potential for improved cooperation, while the changes in Sudan are still ongoing. South Sudan has seen decreased conflict and forced migration into Uganda and Kenya, but growing conflict in the DRC caused a new wave of refugees into Uganda. In the Nile Basin, diseases like Ebola in DRC have impeded NBD’s ability to engage in community follow up. Climate change and conflict have also led to migration where some programs were being implemented.</p> <p>The Zambezi Basin project closed in June 2019 and the overall risk remained moderate throughout the life of the project. The Batoka Gorge project was impacted by the situation in Zimbabwe, as well as growing energy and public finance deficits. Good Client and Bank relations at policy and top executive levels was an important element for addressing normally challenging political contexts.</p>

Risk Description	Mitigation applied	Notable Status Updates
<p>2. Insufficient basin-wide commitment. Some countries within a basin may not have formal membership in the participating basin organizations and/or may challenge the basin organization’s engagement with CIWA.</p>	<p>For all applicable projects, CIWA continues to follow the World Bank Safeguards Policy on international waters OP 7.5 which, in the absence of appropriate agreements or arrangements for the entire waterway, or parts thereof, requires the beneficiary state to formally notify other riparian states of the proposed project. The Policy lays down detailed procedures for the required notification, including the role of the Bank, period of reply, and the procedures to follow in case there is an objection by one of the riparians to the project.</p> <p>The CIWA basin engagement strategies and/or project development process also provide a means to engage with various stakeholders around the design of CIWA programs.</p>	<p>In the Niger Basin, Guinea has entered into an agreement to construct the Fomi dam, at a more upstream location, with less adverse impacts than the initial one. The NRBMP is financing NBA’s efforts to ensure that the basin perspective remains a focus of the Guinea authorities to maximize positive transboundary impacts.</p> <p>The NBD is a network of network organizations in the Nile Basin countries: there is commitment among members, though in varying levels. In some country National Discourse Forums (NDFs), there is a mentality of dependence for support from the Secretariat. In others, like the DRC, the national chapter are self-driven. The Burundi NDF has an MOU with government, and they are called upon by government on key sector issues, for instance, to mobilize communities to handle disasters.</p>
<p>3. Inadequate stakeholder voice. Stakeholders may not fully engage in the project cycle, resulting an inadequate voice in decision-making, raising the potential of public protest or civil action that could jeopardize or delay development projects.</p>	<p>The program prioritizes the involvement of stakeholders and thorough consideration of stakeholder needs and concerns throughout the project cycle. One of CIWA’s four result areas (a “Platform for Cooperation”) aims to strengthen stakeholder engagement in water resources management and development.</p>	<p>Across the diverse cultural and political landscapes in Africa there are differing amounts of space for strong stakeholder voice and participation. In some transboundary basins the strategy for stakeholder engagement is the same or on a positive trajectory: RBOs have a Stakeholder Engagement Strategy documents yet risks around the structure of the advisory and</p>

Risk Description	Mitigation applied	Notable Status Updates
		decision-making stakeholders are unchanged yet remain significant. In other basins, transboundary water discourse is treated only as a national security issue.
4. Inadequate coordination between participating basin organizations. If participating basin organizations have mutually inconsistent objectives, this may weaken the overall development effectiveness of CIWA's program.	<p>CIWA works to encourage and motivate strong cooperative working relationships. A Basin Support Plan is developed for all basins or regions in which CIWA has a long-term engagement. The BSP outlines CIWA's vision for support and changes in the basin, including alignment of CIWA-supported projects with the broader objectives of each of the basin organizations, as well as potential synergies, any overlaps or gaps and ways to overcome them.</p> <p>CIWA also seeks out ways to facilitate learning across basins in Africa.</p>	<p>During FY19 CIWA facilitated a visit of the new head of the Niger Basin Authority to Addis Ababa to join the World Bank's Africa water week there, as well as visit ENTRO.</p> <p>CIWA attended the General Assembly of the African Network of Basin Organizations (ANBO) where it presented ideas to facilitate greater exposure to digital data opportunities across river basins in Africa.</p>
5. Inadequate implementation capacity and readiness can cause short to medium-term delay. Some basin organizations may have insufficient capacity or experience to effectively engage in basin management and development, causing delays in project implementation which could affect the overall pace of the program achieving its objectives.	<p>During project preparation, Bank experts assess implementation capacity and readiness of the recipient organization and plan the magnitude and complexity of CIWA's engagement accordingly. The Bank provides support for financial management, procurement, and project management. Project-supported capacity enhancement might also be a contingency for project approval, for example, a project may be conditioned on the hiring of an environmental and social expert to provide safeguards support. Many projects address this risk by designating an institutional support and capacity building</p>	<p>The Volta Basin Project was impacted by the lack of required staffing in critical positions such as procurement and safeguards which caused delays in implementation. While these problems were resolved by the new leadership in 2018, the project had to be restructured, and the additional delays caused by restructuring did not leave enough time for implementation of investments that were prepared.</p> <p>The NRBMP has financed an updated institutional and organizational analysis of the</p>

Risk Description	Mitigation applied	Notable Status Updates
	<p>component that addresses this risk. In addition, CIWA can employ Bank-executed programming as an initial financing modality to strengthen recipient implementation capacity and readiness.</p>	<p>NBA and a series of sensitization missions in the member countries by the Executive Secretary to obtain political support in favor of the proposed improvements.</p> <p>This Zambezi River Basin Management project was impacted by the level of participation and high turnover of member state representatives dealing with transboundary water. ZAMCOM is all a new organization operating with minimum functionality and lacked staff with requisite skill to address technical and administrative elements of the project.</p> <p>In the Nile Basin staffing and capacity risks continue to exist because of delayed or incomplete country contributions to NBI.</p> <p>Over the last year NBD had limited financial resources which affected its outreach and ability to implement its planned activities.</p>
<p>6. Technical complexity of transboundary water projects can lead to long-term delay. Transboundary water programs are inherently complex and require seasoned perspective to avoid pitfalls and errors that can seriously undermine management and can adversely affect the progress of development projects and cause long-term delays.</p>	<p>CIWA taps into the global structure of the Bank and the embedded strong technical expertise of Bank staff on both sectoral and transboundary-specific fronts during project preparation and implementation.</p>	<p>The Volta project illustrated the challenge of addressing technical and political complexity within a standard project implementation period of 4 years. There was a lack of realism in planning for both studies and implementation in one project cycle.</p>

Risk Description	Mitigation applied	Notable Status Updates
<p>7. Insufficient World Bank capacity to engage across an increasing number of basins.</p>	<p>Before starting an engagement with a new basin, CIWA ensures that there is sufficiently strong technical capacity as well as regional experience to lead the engagement within the World Bank.</p> <p>CIWA also mitigates this risk by collaborating closely with Bank country offices as well as by drawing on local knowledge of other partners. Transparency and good information flows between the Bank and partners help ensure a strong partnership.</p> <p>CIWA focuses most of its existing resources on priority basins and identification of any additional priority basins would need to be complemented by corresponding assessments and appropriate action to ensure balance between program requirements and staffing availability.</p>	<p>FY19 saw the expansion of support to the Horn of Africa, which built on the existing engagements and capacity within the Nairobi office. The Bank team managing the CIWA engagement is the same as the one managing a complementary IDA engagement.</p>
<p>8. Inadequate prioritization of Stakeholder Engagement and Coordination (Intermediate Results Area 4) and explicit incorporation of gender considerations.</p>	<p>When starting a new engagement in a priority basin, CIWA works with the clients to develop a balanced program with support that cuts across the four results areas. During preparation and implementation, CIWA mainstreams gender, poverty and stakeholder engagement considerations as standard actions. However, because of the typically “upstream” nature of many of CIWA-supported actions, social inclusion and gender-related outcomes may not be within the scope of the CIWA activity. In these cases, CIWA will strive to lay the groundwork for future</p>	<p>Zambezi- The preparatory studies for the Batoka Gorge project included environment and social impact assessment and management plans included stakeholder engagement activities as well as specific steps that take social issues, including gender, into account.</p>



Risk Description	Mitigation applied	Notable Status Updates
	development good practice into any outcomes with recommendations for future action.	
9. Available CIWA financing is insufficient to meet demand. Insufficient financing can cause risks raising expectations of potential recipient partners. Participating donors may be slow to commit resources relative to the demand for engagement by recipient basin organizations.	<p>CIWA continues to mobilize funding but demand from current and potential partners will continue to exceed current funding expectations given the breadth and depth of need across Africa.</p> <p>CIWA conducts regular and careful management of the pipeline to match demand to available resources and set reasonable expectations with our partners.</p>	SIDA committed additional resources during FY19 that enabled CIWA to keep allocating resources to key programs.
10. Fraud; or funds not being used appropriately.	The World Bank requires all trust fund beneficiaries and bidders to observe the highest standard of ethics in Bank financed grants and contracts. All CIWA grants are subject to the Bank's Anti-Corruption Guidelines, the Procurement and Consultant Guidelines, and the Standard Conditions for Trust Fund Grants, which delineate standard operating procedures for any fraud issues. The Anti-Corruption Guidelines provide for certain actions to be taken by grant recipients to prevent and combat fraud and corruption and the Standard Conditions provide for suspension and/or cancellation of disbursements, as well as the refund of disbursed grant proceeds in the event that fraud and corruption does occur. All recipient-executed projects are audited annually by an external	Within the Nile program challenges relating to liquidity of funds were identified which were occurring because of insufficient country contributions to meet core costs. The problems have been rectified by providing the needed financial management training.

Risk Description	Mitigation applied	Notable Status Updates
	<p>auditor as specified in the grant agreement. The Bank may require less frequent audits for small grants while retaining the right to request an audit as needed.</p>	
<p>11. CIWA support for investments in institutions, information systems and/or infrastructure is not sustained or advanced by riparians. CIWA operates upstream of actual investment and has limited control over country uptake of investment plans or sustained support for institutions. This risk becomes even more relevant as financiers other than the World Bank, with more flexible preparation standards, play an increasingly prominent role in financing infrastructure in Africa. This risk builds off of other risks, (for example, insufficient political will, or inadequate country buy-in) but it is important to consider because it feeds directly into the objectives, indicators and targets by which the program will evaluate its success as delineated in its PMF.</p>	<p>CIWA is demand driven and responds to the requests of potential clients. Cognizant of the long timelines, high transaction costs, and non-linearity of cooperative processes, CIWA carefully assesses the sustainability of potential support through in-depth consultations with the client organization and country governments and as informed by its own PEA.</p> <p>Sustainability measures are included in program design, for example capacity building for resource mobilization accompanies project preparatory activities; process for harmonization into national structures are outlined as part of formulating and endorsing regional institutions.</p> <p>Acknowledging that riparian commitments to cooperation can change over time and is driven by perceptions of risks vs. opportunities for cooperation, CIWA places a strong emphasis on maintaining and strengthening the perception of opportunity (which demanded its engagement) through knowledge and information sharing, analytical evidence, and continued dialogue. However, recognizing that riparian commitment to cooperative development can accelerate or lapse around specific issues, CIWA maintains the</p>	<p>Countries will always find it easier to focus on unilateral rather than regional investments. However, the understanding that sustainable infrastructure solutions are often regional in nature is growing, and CIWA continues to contribute to this understanding.</p> <p>As with all MDB projects, there is a risk of preparing projects at a high standard for equitable and sustainable development but the investment being implemented with a different donor with different implementation standards.</p> <p>In technical capacity, there are competing tools for modeling the basin, and some national counterparts are not able to match the RBOs technical capacity and therefore sophisticated tools have less uptake. The NBI, for example, is mitigating this through experimental training modalities, user meetings, a helpdesk, user communities of practice, academic collaborations and other efforts.</p>

Risk Description	Mitigation applied	Notable Status Updates
	ability to provide both long-term systematic and short-term catalytic support, as well as the flexibility of delivering support across the 3Is, allowing it to fine-tune delivery of support during program implementation.	

# Annex E – Financial Information

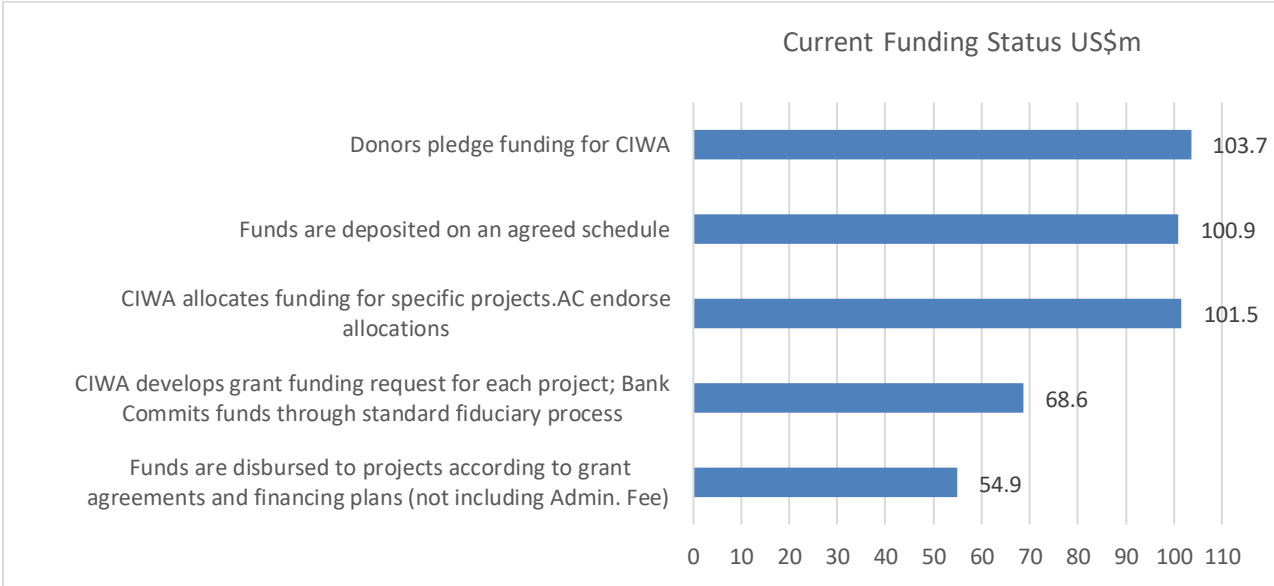
## Financial Overview

This section provides financial information on the Cooperation in International Waters in Africa (CIWA) program for FY19, from July 2018 to June 2019. Unless otherwise noted, the financial information presented in this report, including exchange rates, reflects the status as of June 30, 2019.

The CIWA program is supported by a Multi-Donor Trust Fund (MDTF) and administered by the World Bank on behalf of contributing development partners. Contributing donors to date are Denmark, the European Commission, the Netherlands, Norway, Sweden, and the United Kingdom. This specific type of MDTF is known as a ‘Programmatic Multi-Donor Trust Fund’ to which donors commit funds designed to support a thematic framework rather than financing a specific project. Within this framework, CIWA supports projects executed by recipient organizations as well as projects directly managed by the World Bank.

Consistent with standard World Bank Trust Fund practices, donors pledge funding for CIWA (current pledges total US\$103.7 million) and funds are deposited on an agreed schedule (current deposits total US\$100.9 million). Then, in accordance with CIWA’s strategic planning efforts, funding is allocated to specific programs and projects (current allocations are US\$101.5 million) around the broad themes and areas endorsed by the CIWA Advisory Committee (AC). Following allocation to specific activities, CIWA works with clients to develop Grant Funding Requests (GFRs) and related project documentation. The World Bank then follows technical, legal and fiduciary procedures to approve projects and commits funds through its standard fiduciary processes (current commitments total US\$68.6 million). Funds are then disbursed according to the grant agreements and financing plans (disbursements thus far are US\$54.9 million). CIWA’s funding process is depicted in Figure 1. Additional details on pledges, deposits, allocations, commitments, and disbursements are presented in this section.

**Figure 1. CIWA’s Funding Process**



## Donor Pledges, Deposits, and Allocations

Table 1 shows pledges, deposits, and outstanding balances. Contributing donors to date include Denmark, European Commission, the Netherlands, Norway, Sweden, and the United Kingdom. Donors deposit funds in the CIWA MDTF account according to an agreed schedule of deposits that is detailed in the Administration Agreement or other documents exchanged between the Bank and the donors. This schedule can be revised as necessary to meet project disbursement requirements.

**Table 1. Overview of Donor Pledges and Deposits**

Contributing Partners	Currency	Amount (in Donor Currency)	Amount (US\$)	Amount Received (US\$)	Outstanding Balance ( USD)
Denmark ( DANIDIA)	DKK	18,700,000	3,398,597	3,398,597	-
European Commission	EUR	4,950,000	5,505,143	2,687,850	2,817,293
Norway ( NORAD)	USD		882,746	882,746	-
Sweden ( SIDA)	SEK	384,000,000	46,298,908	46,298,908	-
The Netherlands	USD		26,052,581	26,052,581	-
United Kingdom ( DFID)	GBP	14,500,000	21,592,060	21,592,060	-
Total		422,150,000	103,730,034	100,912,742	2,817,293

As of June 30, 2019, US\$101.5 million has been allocated to CIWA projects and activities. CIWA has assigned a significant amount of the available funding (97 percent) to activities under preparation or implementation. Table 2 presents an overview of the availability and allocation of funding.

**Table 2. Overview of Availability and Allocation of Funding**

Allocation of Funding	US\$
Pledges in signed Administration Agreements	103,730,034
Plus Current investment interest income	3,030,010
Less Administrative cost recovery fee	-1,406,619
Funds Available for projects / activities	105,353,426
Less contingency for currency fluctuation (15% of donor receivables)	-422,594
Funds Available for allocation	104,930,832
Less Allocation to projects/activities	101,524,572
Unallocated funds	3,406,260
% Allocated	97%

The majority of available funds (US\$67.8 million, or 67 percent) are allocated to CIWA's three priority basins, Nile, Niger, and Zambezi. Basin programs include recipient-executed projects and Bank-executed support programs that fund technical assistance and analytical work, which supplement the recipient-executed projects. In certain cases, CIWA has allocated funding for follow-up work on current projects, based on project and organizational performance and riparian states' commitment. Annex C describes the details of all CIWA projects and shows the financial results of projects for which grants have been established.

## Commitment, Disbursement, and Funding Balance

By the end of FY19, the program had committed a cumulative US\$68.6 million in grants, of which US\$54.9 million (80 percent) was disbursed by projects and activities. The pace of disbursement continued to stabilize in FY19 with a slight increase from the previous year. Table 3 provides a summary of the overall cumulative allocations, commitments, disbursements, commitment balance, and current pipeline activity amounts.

**Table 3. Allocated, Committed, Disbursed and Pipeline Amounts (US\$)**

Sub Prog	Allocation Agreed with AC	Grant Approved Amt.	Disbursement	Commitment Balance	Pipeline
Niger <sup>1</sup>	15,845,200	5,845,200	3,309,900	2,535,300	10,000,000
Nile	28,400,000	28,400,000	25,053,716	3,346,284	0
Volta	4,497,879	4,497,879	2,604,586	1,893,293	0
Zambezi	23,520,000	12,570,000	12,364,313	205,687	10,950,000
Orange-Senqu	2,695,822	1,695,822	1,695,822	0	1,000,000
SADC	2,300,000	2,300,000	709,588	1,590,412	0
ECOWAS	1,065,867	1,065,867	1,065,867	1	0
Lake Chad/ Sahel	866,328	866,328	748,343	117,985	0
Okavango	5,945,568	995,568	995,568	0	4,950,000
Horn of Africa <sup>2</sup>	3,600,000	3,600,000	478,129	3,121,871	0
Catalytic Activities Africa-Wide and Opportunistic Engagement	5,400,408	2,800,408	2,385,190	415,218	2,600,000
PMU	6,222,000	4,000,000	3,443,478	556,522	2,222,000
Enhanced Supervision	1,165,500			0	1,165,500
Grand Total	101,524,572	68,637,072	54,854,499	13,782,573	32,887,500

<sup>1</sup>. The grant amount approved excludes \$3.3m that was removed from the project following restructuring.

<sup>2</sup>. \$200,000 over committed.

Note: "Allocation" refers to the endorsement of funds by the CIWA AC. "Commitment" refers to recognition by internal World Bank systems that funds have been assigned to a project or activity. Funds are therefore committed when a GFR has been approved by the World Bank Trust Fund management, putting in place a contractual or scheduled commitment that leads to actual expenditures in the future. "Disbursement" refers to the transfer of funds from the grant account to the clients designated account after a request for specific expenditures is cleared by the Bank. For Bank-executed grants, disbursements are payments made against a purchase order or contract. "Pipeline" activities in the basin are those for which a conditional endorsement was made or subject to approval of the World Bank Trust Fund management system.

By the end of FY19, CIWA had a cumulative inflow of US\$103.9 million, including US\$100.9 million in donor payments and US\$3.0 million in investment income from the CIWA account. Cumulative disbursements were US\$56.3 million, including US\$54.9 million in projects and US\$1.4 million in administrative fees. The balance of grant commitments totaled US\$13.8 million. Table 4 presents the balance available in the CIWA account, which is approximately US\$47.7 million, or a balance of US\$33.9 million when the balance of current commitments of US\$13.8 million is taken into account.

**Table 4: Fund Balance**

Fund Income Vs Disbursement & Commitment Balance	US\$
Total Deposits	100,912,742
Plus current investment interest income	3,030,010
Total Income	103,942,752
Less disbursement (CIWA projects/ activities)	-54,854,499
Less Administrative fee accrual at 2% of deposits	-1,406,619
Balance	47,681,635
Less Commitment Balance	-13,782,573
Total Balance (when including commitment balance)	33,899,062

### Financial Summary of Program Management

CIWA management costs include expenses incurred by the Program Management Unit (PMU) and the World Bank's technical experts who provide strategic advice and support. In addition to staff and consultant costs, this category encompasses costs associated with CIWA donor coordination, outreach and communications, monitoring and evaluation, mid-term review, reporting, partnership meetings, and dissemination activities including website, brochure, and publications, among others. The CIWA Administration Agreement establishes that PMU costs should not exceed 6 percent of total donor contributions. Since the start of the program, CIWA has spent approximately 3.3 percent of the current envelope, keeping PMU expenses well within the agreed-upon range. Overall, the program has been

cost efficient in its management, benefiting from the solid financial management and monitoring systems put in place at program inception.

## Financial Details of Projects Funded by CIWA (US\$)

Basin/ Sub-program	Executed by	Name	TF#	Project #	Allocation	Disbursement
NIGER	NBA	Niger River Basin Management Project	TF018539	P149714	4,200,000	1,714,266
	WB	Niger Basin Support Program	TF018616	P148889	1,175,200	1,142,665
	NBA/WB	Next phase Niger Basin Support (2)	tbd	tbd	10,000,000	
	WB	Enhanced Supervision (NBA)	TF016609	P149714	470,000	452,969
		<b>Niger Total</b>			<b>15,845,200</b>	<b>3,309,900</b>
NILE	NBI (incl NEL, EN)	Nile Cooperation for Results (NCORE) + AF 1 and 2	TF013767	P130694	23,000,000	20,751,076
	NBD	Engaging Civil Society for Social and Climate Resilience in the Nile Basin (NBD) + AF 1	TF015834	P132448	2,500,000	2,474,332
	WB	Nile Basin Support Program	TF0A2051	P156765	1,750,000	831,759
	WB	Enhanced Supervision (NBD)	TF014064	P132448	400,000	284,285
	WB	Enhanced Supervision (NCORE)	TF015335/ TF0A0526	P130694	750,000	712,263
		<b>Nile Total</b>			<b>28,400,000</b>	<b>25,053,716</b>
VOLTA	VBA	Volta River Basin Strategic Action Programme Implementation Project	TF016611	P147202/ P149969	3,500,000	1,651,573
	WB	Volta Basin Support Program	TF015556	P132564	499,879	499,879
		Enhanced Supervision (Volta)	TF015557	P149969	498,000	453,134
		<b>Volta Total</b>			<b>4,497,879</b>	<b>2,604,586</b>
ZAMBEZI	ZAMCOM	Zambezi River Basin Management Project (ZAMCOM)	TF018921	P143546	4,000,000	3,997,114
	ZRA	Zambezi River Basin Development Project (ZRA)	TF016238	P133380	6,000,000	5,932,436
	ZRA	AF - Zambezi River Basin Development Project (ZRA)	tbd	tbd	2,450,000	
	WB	Next Phase ZAMCOM Support (2)	tbd	tbd	8,500,000	
	WB	Zambezi River Basin Support Program	TF011577	P129683	1,050,000	1,001,192
	WB	Enhanced Supervision (ZAMCOM)	TF014926	P143546	650,000	605,912
		Enhanced Supervision (ZRA)	TF014927	P133380	870,000	827,658
		<b>Zambezi Total</b>			<b>23,520,000</b>	<b>12,364,313</b>
OKAVANGO	OKACOM	Okavango Resilience Livelihood Enhancement Project	tbd	tbd	4,000,000	
	WB	P2.1: Okavango Multi-Sector Investment Opportunities Analysis	TA0A0105	P150383	995,568	995,568
	WB	Okavango Basin Support Program	tbd	tbd	500,000	
	WB	Enhanced Supervision (OKACOM)	tbd	tbd	450,000	
		<b>Okavango Total</b>			<b>5,945,568</b>	<b>995,568</b>
ORANGE- SENQU	Botswana	Lesotho Highlands - Botswana Water Transfer	TF016233	P144228	1,527,322	1,527,322
	WB	Next Phase Support	tbd	tbd	1,000,000	
	WB	Enhanced Supervision (LH-B)	TF016038	P144228	168,500	168,500
		<b>Orange-Senqu Total</b>			<b>2,695,822</b>	<b>1,695,822</b>
SADC	SADC	Sustainable Groundwater Management in SADC Member States	TF016748	P127086	2,000,000	561,385
	WB	Enhanced preparation (SADC)	TF015336	P127086	300,000	148,203
		<b>SADC Total</b>			<b>2,300,000</b>	<b>709,588</b>
HORN OF AFRICA	IGAD	Groundwater Information and Investments in the Horn of Africa	TF0B0514	P163554	2,700,000	
	WB	Groundwater Information and Investments in the Horn of Africa	TF0A8681	P163554	500,000	232,796
	WB	Somalia - Support to Transboundary Water Resources Management (including Juba and Shebelle River)	TF0A7944	P167749	400,000	245,334
		<b>Horn of Africa Total</b>			<b>3,600,000</b>	<b>478,129</b>
CATALYTIC PROGRAM	Opportunistic Engagement by WB	P2.2: WRM in West Africa (ECOWAS)	TF016610	P150210	1,065,867	1,065,867
		P2.3: Lake Chad Policy Dialogue	TF0A1005 TF17506/ TF015878/	P144568/ P149275/ P124018/	866,328	748,343
		P2.4: Lake Tanganyika Navigation Analysis	tbd	P161717	0	0
		P2.5: Luapula Water Management Scoping	TF0A5600	P162810	300,000	63,530
		P1: Strategic Overview of International Waters in Africa	TF011569	P129776	280,358	280,358
	Africa Wide by WB	P1: Economic Rational for Cooperation	TF011626	P129777	315,659	315,659
		P1: Political Economy Analysis	TF016821	P150041	517,035	517,035
		P3: Facilitating Africa Wide Hydromet Services	TF0A0106	P151921	97,136	97,136
		P3: Cooperation for Climate Resilience	TF0A1627	P156599	174,579	174,579
		P4: Capacity Building and Knowledge Exchange	TF0A0107	P149931	260,564	260,564
		P4: Improving Public Access to Basin Data	TF016747	P149868	295,077	295,077
		Digital Data Initiative	tbd	tbd	1,000,000	
		Pipelines (tbd)	tbd	tbd	1,600,000	
		Peer Review / Management	TF019125	PA149048	560,000	381,251
		<b>Catalytic Total</b>			<b>7,332,603</b>	<b>4,199,400</b>
		<b>Sub-total (projects)</b>			<b>94,137,072</b>	<b>51,411,023</b>
ENHANCED SUPERVISION	WB	Pipelines (tbd)	tbd	tbd	1,165,500	
PMU	WB	Program Management and Administration	TF011372/ 11377	P122345	6,222,000	3,443,476
		<b>TOTAL</b>			<b>101,524,572</b>	<b>54,854,499</b>



# Appendix F – Value for Money in CIWA Program Design and Implementation

## 1. Summary Value for Money Statement

The CIWA program design and delivery prominently incorporates Value for Money (VfM) principles.<sup>3</sup> Guided by its cost saving measures in program management and administration as well as project preparation and supervision, CIWA operates within its economy targets. While keeping costs down, CIWA has also made strong progress toward the program level objectives and has exceeded the majority of its intermediate results targets, thereby achieving a good return on the financial support provided by development partners.

CIWA's positioning within the World Bank has been crucial to achieving economy and to leveraging technical and financial support in a way that has a multiplier effect on efficiency and effectiveness. This has been accomplished in the following ways:

- By tapping into the World Bank's experience and expertise in managing trust funds, thereby streamlining administration costs
- By leveraging strong global technical expertise of Bank staff across a wide range of relevant sectors such as water, agriculture, energy, environment, governance, and poverty, as well as cross-cutting development challenges including climate change, fragility and conflict, gender, and public-private partnerships
- By drawing on the Bank's longstanding experience in international water cooperation through other programs such as the NBTF, SAWI, WPP, among others
- By tapping into the Bank's deep partnerships with global collaborators to leverage regional experience and networks
- By leveraging additional sources of financing, such as from the GEF, for CIWA-supported projects
- By leveraging multiple sources of follow-up financing such as IDA, AfDB, and other investors for projects where CIWA supports bankable project preparation

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<sup>3</sup> CIWA evaluates its Value for Money (VfM) using DFID's 3Es Framework, defined in *"DFID's Approach to Value for Money," July 2011* as:

**Economy** – Are we or our agents buying inputs of the appropriate quality at the right price? Inputs are things such as staff, consultants, raw materials, and capital that are used to produce outputs.

**Efficiency** – How well do we or our agents convert inputs into outputs? Outputs are results delivered by us or our agents. We or our agents exercise significant control over the quality and quantity of outputs.

**Effectiveness** – How well are the outputs from an intervention achieving the desired outcome? Note that in contrast to outputs, we or our agents do not exercise direct control over outcomes.

## 2. What Measures Can Be Used to Assess Value for Money for CIWA?

The following measures can be used to assess CIWA's economy, efficiency, and effectiveness, which together characterize the program's VfM:

### Economy

**Standard Bank Administrative Fee.** Set at 2% of received contributions,<sup>4</sup> this fee covers a range of general services provided by the World Bank's Central Units – treasury, accounting, disbursements, preparation of un-audited financial statements, annual audits, supervision of external audits, donor relations including negotiating framework agreements, and so forth.<sup>5</sup> By covering these essential services with one standard fee, CIWA limits transaction costs and ensures that an enabling environment is provided for the managing and disbursing units to properly perform their responsibilities for the program.

**Program Management and Administration.** Capped at 6% of contributions to the fund, this fee covers all management and administration responsibilities of the program management team including development and implementation of program-specific management tools, procedures, and systems; negotiating the replenishment and expansion of existing programs; soliciting and evaluating activity proposals and allocating programmatic funds to implementing units; work program planning; program level resource planning; budget planning and management; program monitoring and evaluation; program communications and outreach; donor visibility, donor coordination, and donor meetings; and results reporting for the program.

**Enhanced Preparation and Supervision.** To ensure high quality program delivery, World Bank policies require ensuring that implementation of trust fund activities complies with applicable Bank policies and procedures<sup>6</sup> and that all recipient-executed activities are adequately supervised and implemented in line with the terms and conditions of the Administration and Grant Agreements as well with Bank supervision standards and procedures. Estimated at 6% of contributions to the fund (but only charged against actual costs), preparation and supervision costs cover the cost of identifying and scoping possible projects, supporting preparation and undertaking implementation support and supervision. As specified in the Administration Agreement, the Bank will seek the CIWA Advisory Committee's prior approval in case enhanced supervision costs of CIWA activities increase beyond the amount noted in the administration agreement, and these costs increase as a result beyond 6%.

CIWA has established certain norms to maintain enhanced supervision costs under 6% of contributions to the fund – one-time identification and preparation cost of US\$150,000 per project; and implementation supervision cost of US\$100,000 per year for three years over the duration of a project. The CIWA norm for enhanced supervision costs are lower than standard IDA operation costs. World Bank Africa Region data shows that the average cost to prepare an investment project is around

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<sup>4</sup> A standard fee is applied to all contributions to World Bank trust funds based on the characteristic of the trust fund.

<sup>5</sup> A complete list of general services covered by the Standard Bank Administrative Fee can be found in Appendix 3 (3.1) of the Administration Agreement

<sup>6</sup> World Bank CFPTO Trust Fund Handbook (revised July 8, 2010)

US\$350,000 and the annual cost for supervision of a project around US\$150,000. Costs for preparation and supervision of regional projects under IDA are normally expected to be higher due to additional complexity. CIWA achieves lower costs by basing budgets for projects on a careful assessment of estimated costs as well as through effective procurement processes, cost-sharing and greater travel efficiencies, using video connection for meetings where possible, convening different CIWA meetings back-to-back where feasible and linking to other water sector-related meetings to take advantage of synergies. Within the overall 6% cap, the Program Manager has the discretion to allocate additional preparation or supervision funds to individual projects based on need.

**Leverage Ratio.** CIWA improves its economy by leveraging additional sources of funding where available and appropriate to projects, thereby reducing its unit cost of inputs in relation to the overall sum of outputs it mobilizes. CIWA uses the following metric as an indicator of increased economy due to leveraging of funds from additional sources:

$$\text{Leverage ratio} = \frac{\sum \text{Funds leveraged from additional sources for CIWA projects}}{\sum \text{CIWA contributions to cofinanced projects}}$$

In terms of leveraging additional funds to improve the economy of CIWA-supported projects (by expanding overall output and thus reducing per unit cost of CIWA inputs), CIWA co-financed the NCORE project in partnership with the NBTF, and two projects – SADC Groundwater Management and Volta River Basin Strategic Action Programme Implementation – in partnership with the GEF.

Following is CIWA’s leverage ratio at close of FY19, which illustrates CIWA’s economy in relation to CIWA contributions.

Project	CIWA Contribution (Million US\$)	Co-financier	Partner Contribution (Million US\$)
Nile Cooperation for Results Project	23.5	NBTF	16.5
Southern Africa Development Community Engagement	2.0	GEF	8.2
Volta River Basin Institutional Development and Strategic Action Programme Implementation Project	3.5	GEF	7.2
<b>CIWA contribution</b>	<b>29.0</b>	<b>Leveraged funds</b>	<b>31.9</b>

Leverage ratio = 1.1, i.e., on average, for every dollar that CIWA contributed to co-financed projects, CIWA was able to leverage additional funding sources to provide input of 1.1 dollars to its projects.

### Efficiency

**Intermediate Results Areas Indicators.** CIWA focuses its project level work in four intermediate results areas. Progress in these areas is measured using their corresponding indicators, as listed in the CIWA Results Framework in Appendix A. CIWA uses these indicators to measure its efficiency, i.e. its ability to achieve intended outputs toward its development objective. These indicators reflect the short and medium-term benefits generated by CIWA support. In FY19, CIWA fully met its targets in all project

development indicators and intermediate result areas except for one, which was partially met. More detail on results reporting can be found in the results section of this report.

The indicators found in CIWA's Results Framework, however, do not fully capture secondary and tertiary benefits of CIWA support. A transboundary institution strengthened by CIWA, for example, can facilitate a series of subsequent regional cooperation actions. A vast number of people receive various levels of benefits as a result of each cooperative action facilitated by the strengthened transboundary institution. These outputs are counted and reported on at the basin and project level but are too broad and distinct to aggregate at the program level, given the nature of issues supported and the timeframe it takes for such benefits to manifest. In the long run therefore, CIWA's actual efficiency is greater than that quantified through the indicators in its Results Framework.

### Effectiveness

**PDO-level Indicators.** CIWA measures its effectiveness, i.e. its ability to achieve its intended program development outcomes, through its two PDO-level indicators listed in the CIWA Results Framework. provides detailed results reporting.

CIWA partially met its effectiveness targets in FY19. In FY19, the total investment value influenced by CIWA (mobilized and potential) was US\$17.4 billion. This comprises of US\$11.2 billion in potential investments influenced and US\$6.2 billion in mobilized investments influenced – which surpasses CIWA's FY19 target of US\$10 billion influenced. CIWA partially met its target of 40 million potential direct beneficiaries for the same reporting period with an estimated 26.9 million direct beneficiaries through potential and mobilized investments influenced by CIWA.

**Investment Influenced Ratio & Potential Beneficiaries Ratio.** CIWA further uses the following two metrics to measure its effectiveness in using its available resources to achieve development outcomes:

$$\text{Investment influenced ratio} = \frac{\sum \text{Value of investment influenced}}{\sum \text{Value of overall program in operation}}$$

$$\begin{aligned} \text{Potential beneficiaries ratio} \\ = \frac{\sum \text{Potential direct beneficiaries from investments influenced}}{\sum \text{Value of overall program in operation}} \end{aligned}$$

These metrics are based on CIWA's program development objective indicators and the size of the program in operation, or the total allocated amount of the overall program envelope.<sup>7</sup>

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<sup>7</sup> Note that the accounting for these two indicators has changed from the past years', the difference being that this year the denominator considers the value of overall program in operation (amount allocated out of the overall program envelope) instead of only the funding in operation in the CIWA-supported projects that influenced the particular investments and beneficiaries. Using program-level values in calculating these indicators provides an improved picture of program-level efficiency.

Investment influenced ratio = 238, i.e., on average, for every dollar contributed by CIWA, the program influenced 238 dollars of investments that promote cooperative sustainable, climate-resilient growth.

Potential beneficiaries ratio = 0.15 beneficiaries/US\$ contributed.

### 3. Commercial Improvement and Value for Money

CIWA maintains economy in its procurement (minimizing costs and ensuring high quality) by requiring that all recipient-executed activities finance goods, works, and services in accordance with the Bank's guidelines on "Procurement under IBRD Loans and IDA Credits" and the Bank's guidelines on the "Selection and Employment of Consultants by World Bank Borrowers," jointly referred to as the "Procurement and Consultant Guidelines."<sup>8</sup> Similarly, for all Bank-executed CIWA activities, the Bank is responsible and carries out procurement of goods as well as employment and supervision of consultants in accordance with applicable policies and procedures. Among other things, the guidelines provide specific instructions for use of Bank documents (standard bidding documents, requests for proposals, contract forms); conflict of interest; advance contracting; co-financing; mis-procurement; and fraud and corruption.

### 4. Availability of Finance

At the end of FY19 CIWA was a program of US\$103.7 million co-funded by the Denmark, the European Commission, the Netherlands, Norway, and Sweden. Strong client demand for CIWA support, combined with 97 percent of the program's current funding envelope being provisionally allocated, means that needs to continue raising funds in order to expand its impact. There continues to be strong interest in CIWA from its core donors, and the Netherlands had begun the appraisal of the next phase of funding during FY19.

### 5. Does the CIWA Program Still Represent Value for Money?

The CIWA program operates in a complex space where progress is non-linear. This means that progress and setbacks go hand-in-hand and may affect the development indicators from time to time. However, the evidence strongly suggests that the CIWA program still represents value for money. Specifically, CIWA partially met its intended PDO targets, and numerous CIWA influenced investments successfully mobilized financing; CIWA maintained its Program Management & Administration Costs under 6% as well as enhanced supervision costs under 6%; and CIWA performed well in all three economy and effectiveness metrics in FY19. The CIWA program therefore demonstrated its commitment to the principles of economy, efficiency, and effectiveness and therefore strongly represents value for money.

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<sup>8</sup> OP 11.00 in the World Bank Operational Manual, available at <http://web.worldbank.org/WBSITE/EXTERNAL/PROJECTS/EXTPOLICIES/EXTOPMANUAL/0,,contentMDK:20064773~menuPK:4564185~pagePK:64709096~piPK:64709108~theSitePK:502184,00.html>