

## SITUATION

The population in Africa is rapidly expanding, with its current 1.2 billion population projected to reach an estimated 2.8 billion by 2060. Currently only 58 percent of Africans have access to safe drinking water, less than 5 percent of cultivated land is irrigated, and only 10 percent of hydroelectricity potential is utilized. Compounding these needs, much of Africa is highly vulnerable and under-prepared to cope with the impacts of climate change. By 2020, a projected 75 to 250 million people in Africa will be exposed to increased water stress.

Tapping into Africa's tremendous water resources has the potential to significantly strengthen the region's water security, improve livelihoods, and fuel economic growth. Improved water management can make a critical contribution to achieving food security, reducing vulnerability to climate change, improving human health and sanitation, and increasing energy generation and industrial expansion.

With 90 percent of water in Africa falling within 63 international river basin catchments crossed by multiple borders, water management in the region is inherently an international and cooperative endeavor. Managing water-related hazards and risks in transboundary basins is a central challenge in strengthening African resilience to climate change. As demand grows, these rivers will become increasingly developed and pressure on the resource base will further complicate the political, institutional, economic, and financial challenges that countries face as they manage and develop their transboundary rivers, lakes, and aquifers. The urgency to facilitate cooperation around shared waters in Africa increases as competition for the resource grows and climate change intensifies hydrological variability and unpredictability.



The Cooperation in International Waters in Africa (CIWA) program assists riparian governments in Sub-Saharan Africa in unlocking the potential for sustainable, climateresilient growth by addressing constraints to cooperative water resources management and development.

# Challenges of transboundary waters

The transboundary nature of Africa's water presents challenges to effectively, equitably, and sustainably harness its socio-economic benefits. Issues of sovereignty, historical tensions, difficulty in determining reasonable and equitable use, uneven distribution of resources and needs, and differences in technical and financial capacity introduce inherent complexity to transboundary water resources management. Accentuating these challenges is the countries' lack of confidence that greater economic benefits can be gained from cooperation, and that benefits can be equitably distributed. Further, long timelines and high transaction costs involved in working together often dissuade countries from taking a cooperative approach. Stalled investments or the adoption of sub-optimal unilateral development choices – often resulting from complexities involved in cooperative action – can result in negative environmental impacts, spark political tension over shared resources, and incur significant costs and foregone benefits, many of which disproportionately impact poor and vulnerable populations.

The challenges faced by the riparian nations in Africa can be overcome through strategic and coordinated action beginning with shared, trusted information and inclusive dialogue that build knowledge, trust, and confidence, and lay the foundation for cooperative transboundary institutions and infrastructure. Overcoming the transboundary divide requires resources, time, and riparian commitment.

# COOPERATION IN INTERNATIONAL WATERS IN AFRICA

Building on the World Bank's extensive experience in transboundary water resources management around the world, the Cooperation in International Waters in Africa (CIWA) program was founded in 2011 to support Sub-Saharan countries in taking a multi-disciplinary, integrated, and cooperative approach to enable increased productivity and economic growth, reduce risk from water-related disasters, ensure sustainability of the water resource base, and strengthen regional stability and integration. CIWA support brings together national governments, regional organizations, international organizations, and civil society to ensure that stakeholders' concerns are addressed and resulting benefits are equitably distributed. Managed by the

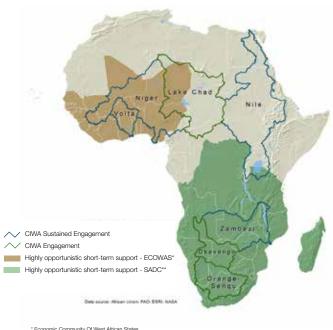
understand transboundary water issues and inform decisions.

CIWA's objective is to strengthen cooperative water resources management and development to enable sustainable, climate-resilient economic growth in the region. CIWA uses a three-pronged approach to deliver results, employing strategies to strengthen and enhance institutions, information, and infrastructure.

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CIWA provides support through long-term engagement, highly targeted short-term engagement, and knowledge generation and management. Through long-term engagement with priority basins, CIWA enables steady progress towards cooperation by strengthening foundational elements such as data, agreements, institutions, and investment and operation plans. Shorter-term engagements explore potentially high-impact opportunities for propelling cooperation in areas outside CIWA's priority basins through analytical work, capacity building, or technical assistance. Knowledge management activities strengthen the evidence base for and develop tools that facilitate cooperative development and management of international waters.

World Bank, CIWA is uniquely poised to provide neutral thirdparty facilitation, technical support, and critical analysis to better



# Opportunities in transboundary waters

Not only does transboundary cooperation allow countries to advance sound and sustainable regional and national infrastructure for storing, regulating, and exploiting their water resources, it frequently provides benefits above what one country could reap by acting alone. For example, a multi-sector analysis of the Zambezi River shows that cooperative operation of existing infrastructure could increase energy production by 23 percent without any additional investments but through added efficiencies in operation.

Collaboration allows countries to make strategic regional and national decisions to manage and reduce shared water-related risks stemming from hydrological variability and long-term climate change, neither of which is confined to national borders. By working jointly to develop a regional information and knowledge base on weather and climate phenomena – establishing collaborative early warning systems to protect against water-related disasters, making institutions more flexible in response to changing climate outcomes, and establishing requisite infrastructure to manage flow variability – countries build resilience to the unpredictability and extreme events that come with climate change.

INFORMATION	INSTITUTIONS	INFRASTRUCTURE
Collaboratively generate data, information, and knowledge and place in the public domain	Develop and strengthen legal, policy, and administrative instruments, and provide training to strengthen understanding and implementation of institutional arrangements	Facilitate riparian dialogue to evaluate and prepare regional investments plans, and conduct consultations to allow civil society and private sector to articulate needs and concerns around collaborative investments
Jointly develop and improve basin modeling tools	Develop and employ mechanisms to improve institutional and financial sustainability of regional organizations	Identify, advance, and improve the quality of regionally beneficial investments, and create mechanisms for the care and development of natural and built infrastructure
Provide training to improve the use of data, information systems, and analysis tools	Strengthen institutional processes and planning through the inclusion of gender, poverty, environmental, and climate change considerations	Provide training to strengthen investment planning, preparation, packaging for financiers, and project implementation



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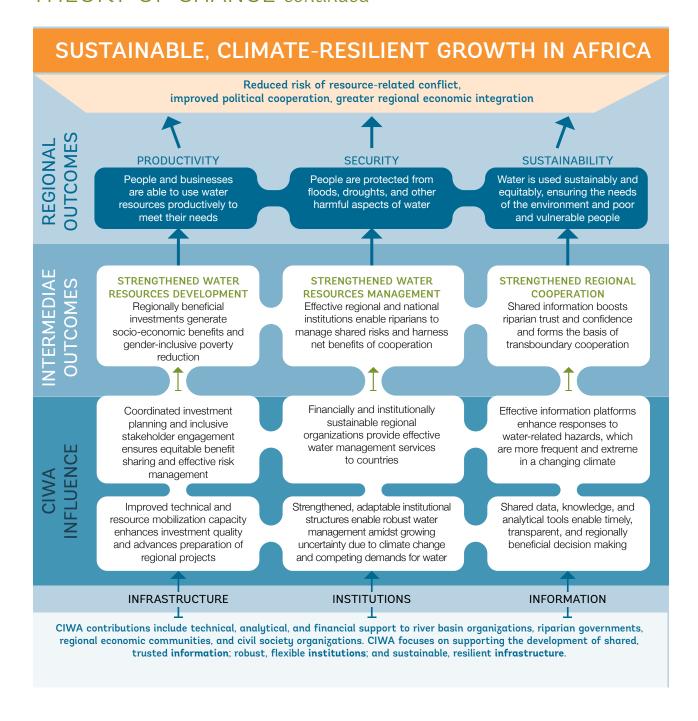
### THEORY OF CHANGE

CIWA assists riparian governments in Sub-Saharan Africa in addressing constraints to cooperative water resources management and development, with the goal of unlocking the potential for sustainable, climate-resilient growth. By supporting countries to work together to share information, strengthen institutions, and advance sustainable investments, CIWA enables countries to use their transboundary water resources productively and equitably, protect people and property from water-related shocks, and ensure sustainability of the resource base. A cooperative approach to managing shared risks and equitably sharing socio-economic benefits presents countries with opportunities to reduce resource-related conflict and strengthen regional integration, all of which contribute to sustainable economic growth, poverty reduction, and resilience to climate change.

See Theory of Change infographic on next page



#### THEORY OF CHANGE continued



#### SUPPORT FOR CIWA

The CIWA program represents a partnership between the World Bank and the governments of Denmark, Norway, Sweden, Netherlands, United Kingdom, and the European Union. Since its inception, development partners have entrusted CIWA with over \$72 million in pledges and contributions for fulfilling its mandate. In order to expand its impact in response to the substantial expressed demand from continental partners, CIWA is planning to deepen its program of support and welcomes interested development partners. Future CIWA programming plans will continue to balance support for institutional strengthening measures and kmoup capacity building for resource mobilization, increasing basin-level investment planning, expanding transboundary groundwater management, and developing innovative mechanisms to sustainably manage natural infrastructure.











