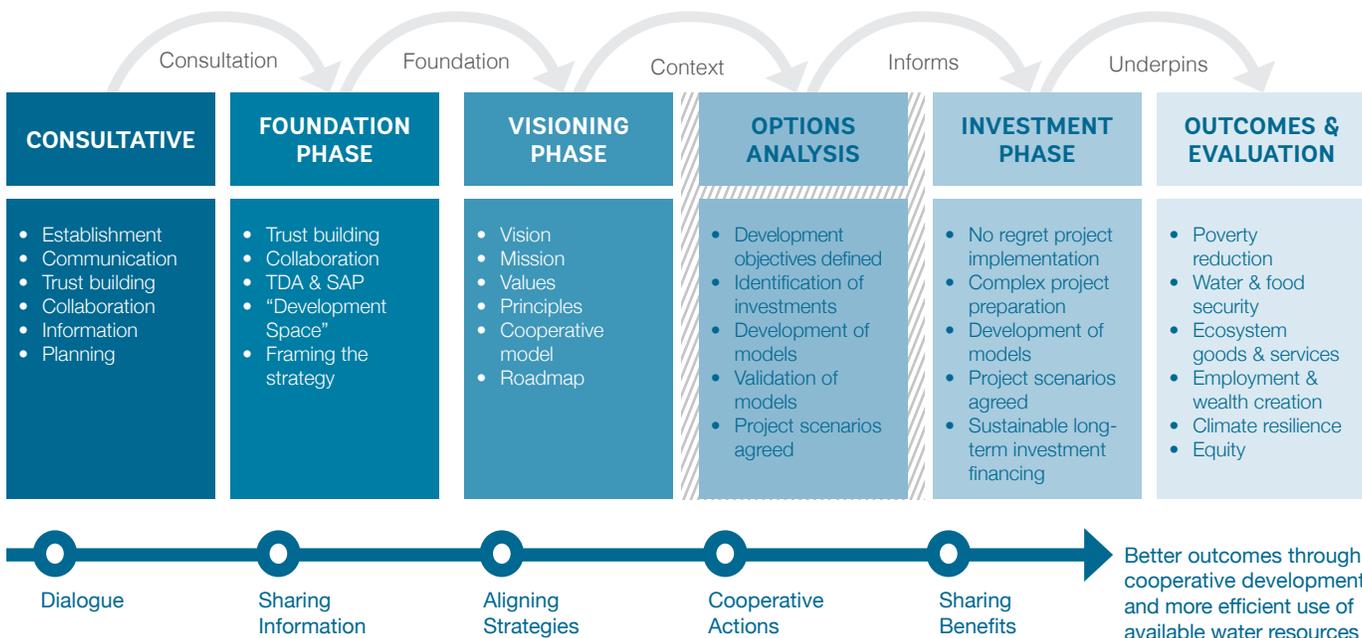


ADDRESSING POVERTY THROUGH MULTI-SECTOR INVESTMENTS IN THE CUBANGO-OKAVANGO RIVER BASIN

The Multi-Sector Investment Opportunities Analysis (MSIOA) is part of a systematic strategy by the Permanent Okavango River Basin Water Commission (OKACOM) to assist the member states in achieving socially just, economically prosperous, and environmentally healthy development of the Cubango-Okavango River Basin (CORB). This is part of an effort to define a Sustainable and Equitable Climate Resilient Investment Program among the member states to address development challenges within the basin.

- The Cubango-Okavango River Basin is one of the world's most unique, near pristine, free-flowing rivers and central to sustainable economic development within the arid landscapes of southern Africa. The basin's complex flood pulse cycle supports local communities and sustains a rich and unique biodiversity that make it a wetland of international importance and a World Heritage Site.
- Risks associated with persistent poverty among the member states (Angola, Botswana, and Namibia) present the single biggest threat to the long-term sustainability of the system. However, the commitments to peace and prosperity among the riparian states and the broader efforts of the Southern African Development Community to facilitate greater regional integration provide prospects for increasing development.
- The MSIOA builds on a long history of cooperation among the member states of the Cubango-Okavango River Basin. The MSIOA is intended to assist decision makers in pursuing investments in the basin to address poverty, while preserving the unique ecology and reinforcing cooperation. The MSIOA builds on the Transboundary Diagnostic Analysis and the Strategic Action Plan for the Basin.
- The MSIOA identified basin development scenarios within potential economic, social justice, environmental, and climate resilient trajectories to the year 2040. These scenarios were aligned with the OKACOM Shared Vision, national development objectives, and investment plans to outline a series of options for joint actions within a desired and shared 'development space'.
- The joint actions identified through the MSIOA inform the Sustainable and Equitable Climate Resilient Investment Program. The joint actions are structured around three target areas:
 - Climate-Resilient Livelihoods Enhancement Program
 - Enabling Basin-Wide Ecotourism in the Okavango River Basin Program
 - Cooperative Infrastructure Development Program
- Implementation of the joint actions in the three proposed programs requires an estimated US\$900 million, a review of the existing institutional arrangements, and would support the establishment of a dedicated endowment fund. Financing options include global public funds, such as the Green Climate Fund, a framework for facilitating private sector investments, and a road map for joint development of large-scale infrastructure. These are intended to support long-term investments by shifting away from short-term project financing toward longer-term sustainable financing

FIGURE 1. EVOLUTION OF THE CONCEPTUAL FRAMEWORK FOR THE SUSTAINABLE AND EQUITABLE CLIMATE RESILIENT INVESTMENT PROGRAM IN THE CUBANGO-OKAVANGO RIVER BASIN



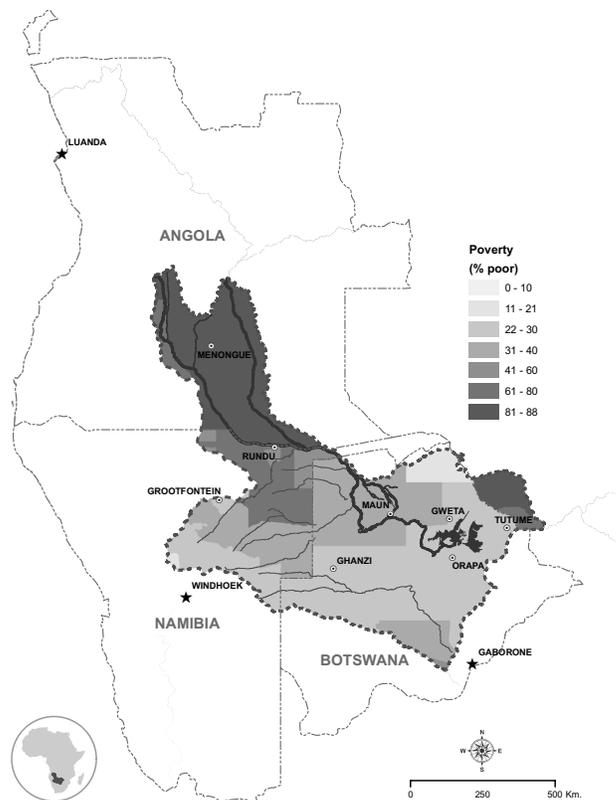
streams.

PROJECT OVERVIEW

The Cubango-Okavango River Basin is one of the world's most unique wetland environments and central to securing sustainable development within the arid landscapes that characterize the region. The distinctive hydrology creates a globally renowned but fragile ecosystem that is sensitive to hydrological, climatic, and biological changes. The Okavango delta is home to some of the world's most endangered species of large mammals and provides the basis for a rich and vibrant high-value nature-based tourism industry. This irreplaceable ecosystem also has significant cultural value and sustains the largely natural resource-dependent livelihoods of people living along the river. The river is globally recognized as an international public good as well as a wetland of international importance under the Ramsar Convention and a United Nations Educational, Scientific, and Cultural Organization (UNESCO) World Heritage Site.

The environmental integrity and long-term protection of the basin depends on addressing the underlying drivers of poverty. Accelerated environmental changes in the basin are largely driven by four factors—population dynamics, land use change, poverty, and climate change—leading to deterioration in water quality, changes in the flood pulse, and diminishing biota. The near pristine nature of the basin is a product of the relatively low level of economic development within the Cubango-Okavango River Basin. This reflects a complex geopolitical history and the fact that the basin populations are remote relative to the countries' capital cities and main centers of economic activity.

FIGURE 2. POVERTY DISTRIBUTION WITHIN THE CUBANGO-OKAVANGO RIVER BASIN MEMBER STATES.



This asymmetry is reflected in the income inequality within each of the middle-income member states and in the social development indicators that are lower than the national figures. As a result, the risks associated with persistent poverty present the single biggest threat to the long-term sustainability of the Cubango-Okavango River Basin.

The MSIOA, financed by the multi-door trust fund for Cooperation in International waters (CIWA), provides the tools to explore different development pathways that meet national development and poverty reduction objectives while striving to sustain the basin's ecosystem services and the delta's global value. The commitments to peace and prosperity among the member states and the broader efforts of the Southern African Development Community to facilitate greater regional integration provide the prospects for increasing development. The three cooperative investment programs — Climate-Resilient Livelihoods Enhancement, Enabling Basin-wide Ecotourism, and Cooperative Infrastructure Development—are intended to address equity concerns and environmental sustainability, provide economic opportunity, and increase the benefits from irrigation and hydropower to all three member states.

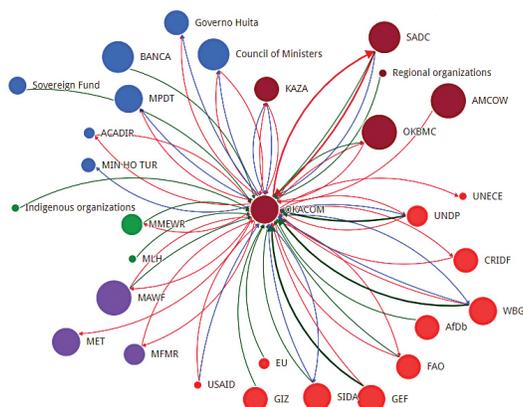
APPROACH

In 1994, Angola, Botswana, and Namibia established OKACOM to promote coordinated and sustainable water resources management while addressing the legitimate social and economic needs of the three member states. With support from CIWA, and in close collaboration between OKACOM and the World Bank, the MSIOA was used to explore development opportunities through applied modelling of the economics, hydrology, and the environmental impacts of a range of development options.

These models build on research conducted over the past 20 years under various cooperative endeavors. National investments were assessed within a cooperative context that included information from existing strategy plans and research. The MSIOA was an iterative process during which a range of stakeholders from various ministries in each of the member states were consulted about potential opportunities and sector plans along with the realization and distribution of derived benefits. In addition, the three member states and various partners held substantive discussions around strengthening OKACOM to realize the basin's Shared Vision.

The MSIOA was complemented through a series of parallel activities that included a network map of stakeholders and an assessment of the benefits derived from cooperation. These were developed through consultative mechanisms and cooperation with a range of stakeholders within the basin and the member states, as well as development partners, including the U.K. Department for International Development (DFID), U.S. Agency for International Development (USAID), United Nations Development Programme (UNDP), Global Environment Facility (GEF), United Nations Economic Commission for Europe (UNECE), the European Commission (EC), and Swedish International Development Cooperation Agency (SIDA). An analysis of the numerous complex relationship pathways between various stakeholders helped inform political economy considerations to identify risks and help formulate a strategy for effective project implementation. A scenario analysis provided the tools for exploring methods to foster more altruistic behaviors and address negative externalities to achieve cooperative benefits. The analysis assessed the costs and benefits of cooperative and joint investments compared with unilateral development within and beyond the Cubango-Okavango River Basin. The study also accounted for different climate change scenarios by examining the impact of changes in temperature and precipitation on the basin development scenarios.

FIGURE 3. NETWORK MAP DEVELOPED BY STAKEHOLDERS IN THE CUBANGO-OKAVANGO RIVER BASIN

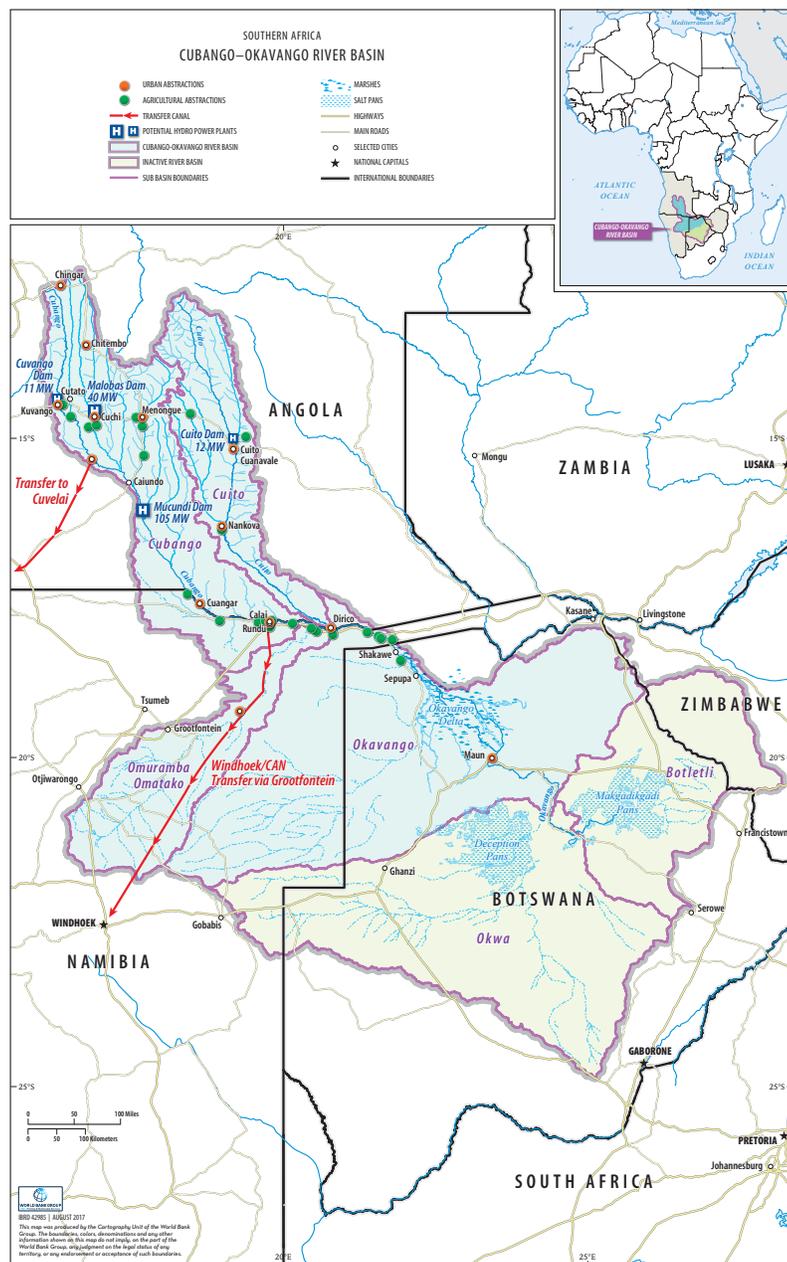


NEXT STEPS

The tools developed through the MSIOA provide OKACOM with the requisite framework to be able to address the underlying drivers of poverty in the Cubango-Okavango River Basin. The tools and findings provide a mechanism to facilitate a negotiated process that can inform decision making within a robust framework. This allows the member states to identify the distribution of benefits and potential negative impacts associated with different investment options.

The MSIOA identifies a series of illustrative joint actions to inform the formulation of a Sustainable and Equitable Climate Resilient Investment Program. These joint actions are aimed at consolidating the cooperative framework among the member states and addressing the underlying drivers that threaten the long-term sustainable development of the Cubango-Okavango River Basin.

FIGURE 4. POTENTIAL URBAN, AGRICULTURAL, AND DAM DEVELOPMENTS



Substantial resources and sustained political commitment will be required to carry forward the recommendations and realize the Shared Vision. The foundation of the Sustainable and Equitable Climate Resilient Investment Program is estimated at nearly US\$1 billion. Such investments are essential to secure the sustainable development of the Cubango-Okavango River Basin within limits of acceptable change.

Addressing the underlying drivers of poverty within the Cubango-Okavango River Basin is fundamental to securing long-term sustainability of the basin's global public goods and to achieving the objectives of the national development agendas with each of the member states. Realizing the recommendations of the MSIOA requires an iterative process of robust interrogation by the member states, with important implications for the future evolution of the institutional arrangements in the basin.

The **Climate-Resilient Livelihoods Enhancement Program** provides a relatively short-term intervention that can build on existing initiatives to provide quick returns in addressing the underlying drivers of poverty. These 'no-regret' measures can be used to demonstrate the proof of concept for longer-term sustained initiatives under a dedicated endowment fund and a proposal is being prepared for submission to the Green Climate Fund and for further CIWA support.

The **Enabling Basin-Wide Ecotourism Program** provides an illustration of how OKACOM could facilitate the mobilization of private sector resources by creating an appropriate enabling environment. Guiding private sector investments in the tourism sector through efforts to extend the distribution of benefits would help consolidate the cooperative venture among the member states and create positive reinforcements for the sustainability of the system. Transaction advisory services specialized in tourism concessions could be implemented over the next two to three years in partnership with ongoing initiatives such as the Kavango-Zambezi Transfrontier Conservation Area (KAZA TFCA).

A **Cooperative Infrastructure Development Program**, such as rescoping the Mucundi Dam, can address development needs in the basin within a sustainable framework and with the added advantage of consolidating the cooperative venture among the member states. Careful design informed by sound scientific information and appropriate institutional oversight mechanisms can ensure sustained benefits for the three member states. Grant financing could be mobilized to support a transparent process around development of transboundary infrastructure.