

CRIDF's Presence in the Save River Basin: Flowing Towards Cooperative Water Management

The Climate Resilient Infrastructure Development Facility's (CRIDF) recent intervention in the Save River Basin is working on multiple levels to improve trans-boundary water management for the benefit of poor, rural communities. By strengthening climate resilience and food security at the community level, the project has created an opportunity for effective inter-nation dialogue, which promotes dialogue and cooperative river catchment management.

Building resilient communities

"When CRIDF came to our rescue, we really applauded it!" exclaims Philemon Makarazda, a farmer from the village of Ndimbo in Zimbabwe's Masvingo Province. He heads one of the 120 households currently benefiting from the Kufandada irrigation scheme, a water infrastructure development project financed and implemented by CRIDF. "Due to climate change, we have experienced one drought after another", he says. "Even though we are working, we cannot get enough food or funds to help ourselves".

"It was a great relief to everybody when CRIDF came. With a project like this one, we have enough funds to help our children reach their goals".

*- Wenceslaus Nhamo,
Chairperson of the
Kufandada River Protection
and Irrigation Scheme
Project Committee*

Philemon describes a situation that's common for the inhabitants of Chivi and Bikita Districts, which lie within the Save River Basin, a water catchment area consisting of tributary flows from the Runde and Save Rivers. Local land use has led to soil erosion and silt build-up in the river and its associated infrastructure, damaging the river ecosystem. The basin, which was already experiencing lower than average rainfall, is in an area that's particularly vulnerable to climate change. Recent years have seen lengthening dry seasons. Unemployment also tops 90% here and there's a high dependence on subsistence farming, which means the population is extremely vulnerable to drought, hunger and malnutrition, while relying on potentially contaminated water sources.



The recently completed Kufandada irrigation development is ensuring the availability of safe, clean water for domestic usage, as well as enabling farmers to boost their incomes by engaging in effective, small-scale, commercial farming. Water is channelled to irrigate 28 hectares of land via sprinkler systems, and Bikita Rural Hospital also benefits from clean water and solar power. To ensure the sustainability of the newly installed system, the riverbanks will be protected with gabion mats and planted with trees to prevent soil erosion and consequential

siltation of the downstream weir. CRIDF has also repaired existing hand pumps and constructed three new boreholes locally to improve household water access. In addition, 5 multi compartment ventilated improved pit latrines have been built to help improve sanitation standards.

A second, similar, water infrastructure scheme at Bindagombe is very near to completion. This will facilitate the irrigation of 38 hectares of farmland, enabling farmers to diversify their crops and grow all year round. Together with the provision of 5 new boreholes for village water collection, the scheme is set to improve the food security and nutritional status of 300 households with a total of 1,200 households benefiting through employment opportunities.

Technical assistance for national water authorities

Building on CRIDF's provision of infrastructure and better land management CRIDF has started working with the Mozambique and Zimbabwean Water authorities to build their capacity to promote better land management, scale up infrastructure for communities as well as operate existing large scale infrastructure more efficiently. CRIDF's 12 workshops (to date) on trans-boundary water management, climate change mitigation and adaptation and integrated water resource management have been well received by ARA-Centro in Mozambique and its counterpart in Zimbabwe, the Zimbabwean National Water Authority, ZINWA.

"The workshop has been an eye-opener for broad, international issues".

– *Workshop participant*

The training sessions, delivered to technical staff at the Save and Runde Catchment Offices, as well as other relevant stakeholders from the water authorities, have not only been successful in building institutional capacity in water management; they have also encouraged a stronger sense of waterway ownership, driving the sustainability of the project. CRIDF's technical assistance has also involved the establishment of a Save Basin Stakeholder Committee to formalise the partnership and facilitate communication.

Using the Kufandada model as a blueprint, CRIDF has now identified a further 50 potential projects in the Save Basin, and has contracted consultants to prepare a funding proposal to the Green Climate Fund for their implementation. CRIDF is fully supporting the Zimbabwean government in preparing the proposal, which – if successful – will mobilise \$50 million to improve the livelihoods of thousands of people and restore the environmental prospects of the basin through the construction of small-scale infrastructure. Usefully, the UNDP has agreed to be the accredited body through which funds would be disbursed.

Promoting regional dialogue and cooperation

The Save Basin is one of three that traverse the border between Mozambique and Zimbabwe. This cross-boundary location has presented challenges for water resource management and development.

CRIDF's intervention in the Save Basin has created a space for dialogue and cooperation. Hosting study tours has facilitated the exchange of information between ZINWA and ARA-Centro, helping to forge better mutual understanding of their respective roles. Both have now implemented and been trained in the utilisation of the same computer modelling software. The system enables a more efficient monitoring of water movement by predicting the impact of precipitation changes. Both parties have also agreed to adhere to the Save Joint Water Commission's Save Dam Operation Rules Framework, which mitigates water allocation issues by providing guidance on the optimal operation of large river infrastructure for managing water resources and promoting climate change resilience. The framework has also helped to significantly improve data collection. For example, the data series for rainfall and information on water resource assessments have been extended by 58 years (now covering 1921 to 2015) as a result. Gathering accurate data has boosted confidence in forecasting and led to better-informed resource allocation.

The CRIDF facilitated cooperation in the Save has led to three agreements between Mozambique and Zimbabwe including:

- i. The computer modelling package to support water resource planning, development and management in the basin.
- ii. The pilot dam operating rules which have resulting in the regular sharing of information on the status of water resources between the two countries.
- iii. Thorough CRIDF's work there has been a provisional agreement to form a Joint Water Commission for the Save, Buzi and Pungwe Basins which is now being discussed at political level between the countries.



CRIDF's initiatives in the Save Basin are resulting in transboundary cooperation and promoting an Integrated Water Resource Management (IWRM) approach. By constructing innovative infrastructure on the ground, CRIDF has succeeded in engaging both ARA-Centro and ZINWA on strategic policy issues that affect the whole basin, and reinforced communication channels between them. CRIDF's approach to trans-boundary water management has positively influenced both countries' attitudes to water governance. Strengthening the relationship between Mozambican and Zimbabwean counterparts is a significant step towards further developing the basin for the benefit of its poorer inhabitants and creating climate change resilience. The optimism that Philemon expresses about schemes like Kufandada is typical for farmers here. "This is a boost for our economy", he insists. "We're now evolving from peasants into real farmers!"