**UPDATED JANUARY 2021** 

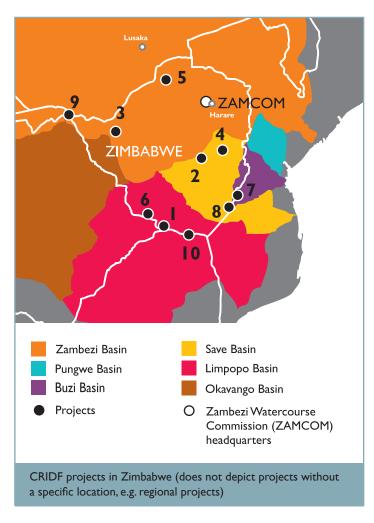
#### **CRIDF** in Zimbabwe

An overview of projects the Climate Resilient Infrastructure Development Facility (CRIDF) has engaged with in Zimbabwe

Zimbabwe is a landlocked country with a population of 16.5 million; it is a low income country. Zimbabwe lies entirely within transboundary river basins. It shares the Buzi, Pungwe and Save Basins with Mozambique, the Limpopo Basin with three other countries, and the Zambezi Basin with seven other countries. Harare, the capital of Zimbabwe, hosts the Secretariat for the Zambezi Watercourse Commission (ZAMCOM). CRIDF supports livelihood interventions in Zimbabwe that build water and food security for the rural poor. CRIDF works in partnership with catchment councils, those organisations with responsibility for transboundary water resource management such as the Zimbabwe National Water Authority (ZINWA) and the Limpopo Watercourse Commission (LIMCOM), regional organisations such as the Kavango–Zambezi Transfrontier Conservation Area (KAZA TFCA). and non-governmental organisations. The objective of these partnerships is building climate resilience for the poor through livelihood interventions in transboundary basins.

Infrastructure planning and development in the Zambezi Basin (Angola, Botswana, Malawi, Mozambique, Namibia, Tanzania, Zambia, Zimbabwe)

In its support of ZAMCOM, CRIDF developed and is supporting the implementation of the livelihoods component of the Zambezi Strategic Plan (ZSP). This will ensure water and food security for the rural poor and in so doing reduce vulnerability to climate change. To achieve this CRIDF is supporting ZAMCOM to prepare the Programme for Integrated Development and Adaptation to Climate Change in the Zambezi Watercourse (PIDACC Zambezi) for African Development Bank funding in associated



with the United Nations Convention to Combat Desertification (UNCCD).

2018-ongoing

Infrastructure planning and development in the Limpopo Basin (Botswana, Mozambique, South Africa, Zimbabwe)

In its support of the Limpopo Watercourse Commission strategy, CRIDF is helping LIMCOM to assess the impact of climate change in the Basin and integrate climate resilience into the planning and development of water infrastructure.

2017-ongoing

## Financial innovation (Botswana, Mozambique, South Africa, Zimbabwe)

CRIDF is working with the Government of Zimbabwe and other stakeholders to develop innovative approaches for financing the development and operation of infrastructure. These approaches include water users from the private sector funding the operation of monitoring and flood warning systems in the Limpopo Basin.

2017-2019

### Eastern Limpopo small dams support programme

Small-scale farmers in Matabeleland, Zimbabwe continuously struggle with erratic rainfall, which results in the failure of rainfed agriculture. Small dams therefore play a crucial role in small-scale irrigation, livestock watering and water supply. Despite this, few new dams have been constructed since 2000. In addition, existing dams have not been well maintained. CRIDF is working closely with the East Limpopo Joint Venture to prioritise dam sites, and design and enhance infrastructure at five locations. Five projects have been constructed that will benefit more than 20,000 people. These interventions will achieve water security and improve livelihoods for the poor rural small-scale farmers in Matabeleland.

2013-2019

See map: project number 1

## Save Basin operating rules (Mozambique, Zimbabwe)

In the Save River Basin, an intricate network of large dams, weirs, canals and other water systems exist to support very large to small irrigation schemes. These facilities have been largely operated independently. This often means that water is in short supply in parts of the Basin while elsewhere there is an excess. To address this problem, CRIDF has established models for the joint operation of existing infrastructure. It has also developed dam operating rules to restrict water use in order to improve assurance of supply for more than 75,000 hectares of irrigation in the Basin. The analysis has also identified untapped water resources. CRIDF has thus further assisted the BuPuSa (Buzi, Pungwe, Save Joint Water Commission) in carrying out a multi-dimensional prioritisation of infrastructure

investments to guide the future construction of new dams in the Basin. The techniques developed during this work are applicable to other transboundary basins in the Southern African Development Community region where there are similar infrastructure problems. 2015–2017

#### Bindangombe climate resilience

CRIDF utilised water from the existing Bindangombe Dam to provide a community owned irrigation scheme comprising 34 hectares of land in a drought-prone area downstream of the Dam. The Bindangombe Irrigation Scheme now allows year-round production of high-yielding crops. A total of 300 households have directly benefitted from this work. This project aims to enhance climate resilience and improve livelihoods for the rural poor. There are also environmental benefits to moving crop production out of the riparian zone as this leads to restoration of the natural riverine environment, which results in improved water quality and natural flood alleviation.

2013-2018

See map: project number 2

# Shared economic growth in protected areas of high biodiversity (Angola, Botswana, Namibia, Zambia, Zimbabwe)

High-value tourism areas are found across Southern Africa. These are areas of high biodiversity and home to millions of poor rural people. A variety of incomeearning opportunities exist in relation to producing quality food in these areas. These would offset the water and carbon footprints associated with imports as well as create economic growth opportunities for local communities. CRIDF identified prospects for developing infrastructure to produce high-quality food and encourage local economic/agricultural development through linkages into local tourism-related value chains. Such interventions would build climate resilience for the poor, support wealth creation and mitigate climate risks. 2015–2017

## Water for livelihoods (Angola, Namibia, Zambia, Zimbabwe)

CRIDF has supported the Kavango–Zambezi Transfrontier Conservation Area Secretariat to identify

livelihood interventions aimed at alleviating water shortages, reducing incidences of human—wildlife conflict, and enhancing people's basic standard of living in Angola, Namibia, Zambia and Zimbabwe. There are more than 3,000 potential beneficiaries at the locations where feasibility studies for permanent water provisions have been completed. Power for the infrastructure needed to make these provisions will be provided by solar panels and wind turbines. Infrastructure construction has been completed at one site and funding applications prepared at other sites. The approach of working with KAZA TFCA has considerable potential for replication, expansion and scale up across the region in other Transfrontier Conservation Areas.

2014–2017 See map: project number 3

#### Improved cooperation in the Buzi/ Pungwe/Save Basins (Mozambique, Zimbabwe)

CRIDF is working closely with ZINWA, which is responsible for the operational management of water resources in Zimbabwe, including the Buzi, Pungwe and Save Basins. These Basins present many transboundary water management challenges, with annual flood incidents and periods of severe water scarcity, contributing to water and food insecurity. CRIDF support is leading to improved monitoring through the capacitation of staff to collect and process data. The enhancement of institutional capacity is critical for cooperation on transboundary water resources management between Mozambique and Zimbabwe. CRIDF has supported the development of a vision for the Basins and is also providing technical advice in the Save Basin in support of a transboundary water agreement.

2013-2019



### Kufundada food security and river protection

CRIDF has improved water security at Kufundada by providing irrigation for 28 hectares of agricultural land (using existing water storage) and has improved the water supply to a local hospital. Including the hospital catchment area, there are more than 30,000 beneficiaries. The intervention has enabled vear-round production of high-vield crops, improving the nutritional status of the poor while reducing dependence on dryland cropping in this drought-prone area. It has also led to the development of other economic activities and better water supplies for patients in the hospital. Power for the project was provided by solar panels. The project has environmental benefits as it moves people out of the riparian zone, thus allowing restoration of the natural riverine environment. It has been 'endorsed' as part of a transboundary plan by both Mozambique and Zimbabwe. The project has high value in terms of replicability and scaling up in the region.

2013-2017

See map: project number 4

## Limpopo water monitoring (Botswana, Mozambique, South Africa, Zimbabwe)

In association with LIMCOM, CRIDF implemented a real-time transboundary system to monitor river flow. The Facility also put into operation an early warning flood forecasting system for the Limpopo Basin – this is benefitting 600,000 poor people who live on the Limpopo floodplain. The initiatives have improved cross-border cooperation and have included partnerships with the private sector. CRIDF continues to work with LIMCOM and the USAID-funded Resilient Waters Program to institutionalise the operation of the early warning system.

2013-2019

#### Kariba border crossing

CRIDF has completed the feasibility studies and is now funding the construction of emergency upgrades for water and sanitation projects at the Kariba (Zimbabwe)–Siavonga (Zambia) border crossing that will increase the climate resilience of more than 70,000 people. These projects include rehabilitation of the intake in Lake Kariba as well as improvements to the water treatment plants and distribution systems in Kariba at a capital cost of nearly £450,000.

2018-ongoing

See map: project number 5

### Water security for Ntalale Rural Service Centre

CRIDF worked with the Zimbabwe National Water Authority to expand and rehabilitate the Ntalale Rural Service Centre water supply. This built climate resilience through water security for some 1,000 direct beneficiaries. A clinic, a primary school, a secondary school and shops also benefitted, as well as people from the broader area who utilise the service centre.

2014-2017

See map: project number 6

# Improving transboundary hydrological information (Zimbabwe, Mozambique, Zambia)

Reliable and timely information is essential for water management; this is even more the case for the management of transboundary waters. CRIDF has worked with ZINWA and other water management agencies to improve the availability of information in both the Save and Zambezi Basins. Specifically, CRIDF has prepared feasibility studies for gauging station on the Runde River and Save River in the Save catchment, shared with Mozambique, which would provide critical monitoring information for flood protection in both Mozambique and Zimbabwe. The importance of this work was given additional prominence following the devastation caused by Cyclone Idai. CRIDF has also completed a review on gauging stations on the Zambezi upstream of Victoria Falls which will improve water management in the Zambezi Basin.

2018-2020

See map: project numbers 7, 8 and 9

## Beitbridge–Musina integrated water supply project (South Africa, Zimbabwe)

CRIDF is working with the governments of Zimbabwe and South Africa to investigate how they can share and utilise the available water resources and jointly plan, develop and manage transboundary infrastructure in a sustainable manner. This study covers the assessment of large dams and water resources within the proximity of the Beitbridge -Musina border area. This includes large and small irrigation schemes, mines and Beitbridge town and environment in Zimbabwe together with Musina town and the planned Special Economic Zone in South Africa. The development of the project will ensure equitable water resources utilisation by ensuring a holistic development approach factoring all water needs across the transboundary project area. A water resource assessment has been completed and options for water utilisation will be investigated.

2018-ongoing

See map: project number 10

# Improved monitoring of the Tuli Karoo transboundary aquifer (Botswana, South Africa, Zimbabwe)

Proper development and management of transboundary aguifers is essential to meet the development objectives of the Southern African Development Community; this includes promoting sustainable groundwater management and design solutions. In respect of this, CRIDF is supporting the implementation of the Tuli Karoo monitoring network which directly contributes to strengthening transboundary groundwater monitoring and data management systems and facilitates the integration of groundwater resources into the Limpopo shared watercourse management. Specifically, CRIDF is completing a feasibility study for the Zimbabwe part of the network. The implementation will be done in parallel to a similar study funded by USAID in the areas on the aquifer in Botswana and South Africa to enhance the holistic sustainability of the monitoring network.

2020-ongoing

#### **Useful links to the CRIDF website**

CRIDF tools and tables: guidance and learning produced by the programme

CRIDF case studies: a demonstration of the work delivered so far by the programme

CRIDF infographics: useful statistics from CRIDF countries

CRIDF countries: more from the CRIDF country overview series

#### ABOUT CRIDE

The Climate Resilient Infrastructure Development Facility (CRIDF) is a UK Foreign, Commonwealth & Development Office (FCDO) supported programme working to provide long-term solutions to water issues that affect the lives of the poor in Southern Africa. Our focus is to work together with organisations to show them how they can better build and manage their own water infrastructure to improve people's lives. Because rivers, lakes and river basins cross borders, CRIDF is working with 12 different countries in Southern Africa that share water resources. In so doing, CRIDF aims to improve the lives of over 200 million people, many of them extremely poor.



