# **CRIDF** in Zambia

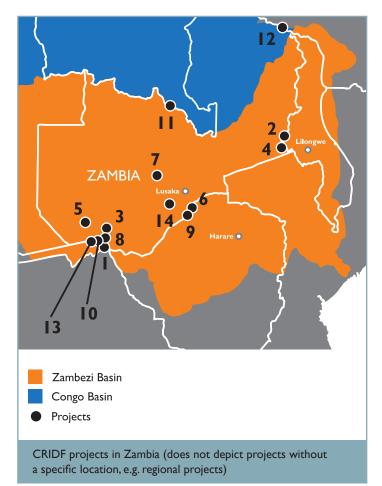
CRIDF

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

Zambia is a landlocked middle income country with a population of 17 million. It is located entirely within the transboundary basins of two rivers – the Zambezi and the Congo. CRIDF's interventions in Zambia have focussed on reducing climate vulnerability and building water security for the rural poor. The Facility has supported the implementation of water supply and sanitation infrastructure at border crossings at Chanida (with Mozambique), Kazungula (with Botswana), Mwami (with Malawi) and Siavonga (with Zimbabwe). It has also prepared and mobilised finance for projects that build water and food security for the rural poor. CRIDF works in partnership with the Government of Zambia through the Eastern and Southern Water Utilities and the Departments of Agriculture and Water. It also works with the private company Illovo Sugar and regional organisations such as the Kavango-Zambezi Transfrontier Conservation Area (KAZA TFCA). All these partnerships aim to build 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 the Zambezi Watercourse Commission (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 association



with the United Nations Convention to Combat Desertification (UNCCD). 2018–ongoing

### Kazungula water supply and sanitation

The Kazungula Water and Sanitation Project aims to provide sustainable and equitable access to a safe water supply and appropriate sanitation in the Zambian border town of Kazungula, located on the border with Botswana. The project included expanding and upgrading the existing water treatment plant, constructing a new bulk water supply pipeline, and increasing reservoir capacity to provide water to over 5,000 inhabitants in the town. In addition, the project provided a private sector managed 'user-pays' ablution block for the transient population at the border post. CRIDF has supported these developments and, in addition, has performed project preparation work and mobilised some £3 million from the German development bank KfW for the larger second phase of the works.

2014–2019 See map: project number 1

# Chipata and Chanida water supply and sanitation

Chipata and Chanida are Zambian border towns – on the borders with Malawi and Mozambique respectively. The towns suffer from inadequate access to water, and sanitation facilities that can trigger the transmission of water-borne disease across borders, stifling commercial and social activities in the sub-region. CRIDF has worked with the Eastern Water and Sanitation Company to construct boreholes and ablution blocks including washing and toilet facilities, and run an awareness campaign on disease transmission and hazards. Improvements in both infrastructure and education have the potential to save many lives and the project will directly benefit around 3,000 people. 2015–2018

See map: project number 2

# 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 humanwildlife conflict, and enhancing people's basic standard of living in Angola, Namibia, Zambia and Zimbabwe. There will be 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

#### 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 opportunities for local communities. CRIDF identified opportunities for developing infrastructure to produce high-quality food and encourage local economic/agricultural development through linkages into local tourism-related value chains. Such interventions build climate resilience for the poor, support wealth creation and mitigate climate risks. 2015–2017

Building climate resilience for smallholder contract farmers in the sugar sector (eSwatini, Malawi, Mozambique, South Africa, Tanzania, Zambia)

CRIDF has worked with Illovo Sugar to develop strategies for increasing the climate resilience of smallholder farmers. Illovo Sugar works across the Southern African Development Community (SADC) region by contracting smallholder farmers to grow sugarcane; this provides income for more than 1.5 million people. More generally, smallholder farmers are important contributors to agricultural production in the SADC region. A key output of the project was a vulnerability assessment and response tool that can be used by the food and beverage industry across the SADC region and beyond. As a result of the CRIDF support, Illovo has developed an outgrower (contract farmer) strategy and has integrated outgrower climate risks into its corporate risk strategy. 2015-2017



#### Chikowa Dam

The Chikowa Dam and Irrigation Scheme in Zambia aims to increase agricultural production and provide water security for 540 people (with additional indirect beneficiaries). To help secure World Bank funding of up to £950,000, CRIDF undertook a feasibility study for the scheme.

2013–2017 See map: project number 4

#### Sioma irrigation

The Sioma Irrigation Scheme aims to provide irrigation for 68.5 hectares of established crop land, benefiting more than 500 people. To help this project capture funding, CRIDF completed a feasibility study, and advised on technical improvements that would make the project more effective – such as providing more efficient irrigation systems. To support an application to a World Bank funded programme, CRIDF also helped to develop a business case linking the irrigation scheme to potential markets. 2013–2016

See map: project number 5

### Water supply and sanitation for the Chirundu border town

The Chirundu Water and Sanitation Project aims to provide long-term and fair access to safe water for approximately 20,000 people living on the Zambian border. CRIDF helped project planners to attract funding by completing a feasibility study for the project and engaging with prospective project financers. 2013–2016

See map: project number 6

### Mashili Small Dam Resilience Project

The Mashili Dam provides water for more than 50 households farming over 10 hectares of land, and is also used to water more than 6,000 head of livestock. CRIDF intervened directly to prevent the physical collapse of the infrastructure until major upgrades could be made: this was seen as a relatively small input to save a valuable resource. Subsequently, CRIDF conducted a feasibility study to identify options for building climate resilience in the community around Mashili, such as providing water for livestock, fish farming and vegetable gardens. The aim was to improve viability and broker funding from the World Bank. 2013–2016

See map: project number 7

#### Kazungula food security

CRIDF completed a feasibility assessment on the Sikauzwe Food Security Scheme near Kazungula, which was originally identified by the Climate Change Adaptation Project of the Zambia's Ministry of Agriculture and Livestock. The purpose was to build climate resilience for nearly 2,000 people along the Ngwezi River and assess potential opportunities for improving the scheme in order to attract financial backing from the World Bank under its existing loan to Zambia.

2014–2015 See map: project number 8

#### Siavonga border crossing

CRIDF has completed the feasibility study for a water and sanitation projects at the Kariba (Zimbabwe)– Siavonga (Zambia) border crossing that will increase the climate resilience of more than 70,000 people. This project includes rehabilitation of the intake in Lake Kariba as well as improvements to the water treatment plant and distribution system in Kariba at a capital cost of nearly £900,000.

2018–ongoing See map: project number 9

## Improving transboundary hydrological information (Zambia, Zimbabwe)

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 the Zambezi River Authority and other water management agencies to improve the availability of information in the Zambezi Basin. CRIDF also completed a review of gauging stations on the Zambezi upstream of Livingstone which will improve water management in the Basin. 2020

See map: project number 10

# Water security project development at border crossings

As part of its pipeline infrastructure development, CRIDF is investigating a number of water security projects at border crossings in Zambia. These include water supply projects at Kasumbalesa and Nakonde on the borders with the DRC and Tanzania respectively. Feasibility studies have been completed for these projects, which reduce climate vulnerability for more than 80,000 beneficiaries and could also benefit over 750,000 travellers a year. CRIDF is seeking to mobilise more than US\$12 million for the implementation of these projects. 2019

See map: project numbers 11 and 12

# Livingstone climate resilient water supply and sanitation

CRIDF has completed a feasibility study for a climate resilient water and sanitation improvements project for the town of Livingstone in partnership with the Southern Water and Sanitation Company. Through improvements to the raw water intake, rehabilitation and extension of the water supply system and improvements to sanitation facilities the project will reduce climate vulnerability for more than 150,000 beneficiaries. In partnership with the Global Water Partnership Southern Africa, CRIDF is now seeking to mobilise up to US\$20 million for the implementation of the project from sources such as the Green Climate Fund, KfW and the African Development Bank.

2018–ongoing See map: project number 13

### Mazabuka Resilience Fund

Together with Zambia Sugar and the Mazabuka Sugarcane Growers Trust, CRIDF is supporting the development of a Mazabuka Resilience Fund that will provide access to finance for smallholder sugarcane farmers to help them implement climate resilience measures, including replanting with climate smart sugarcane varieties, improving irrigation efficiency and expanding the area under cultivation. The Mazabuka Resilience Fund will provide finance to 336 smallscale sugarcane growers (increasing to 500 during the project) farming 2,500 hectares and one larger estate of 1,400 hectares, in which smallholder farmers have a 32% interest, in the Mazabuka area of Zambia. The area is water-stressed because of competing demands for water resources. CRIDF is also seeking financing of up to US\$40 million to capitalise the fund. 2019–ongoing

See map: project number 14

#### 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 CRIDF

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.



