

Zobue Border Town Water Supply and Sanitation

DECEMBER 2019

OVERVIEW

The Zobue Border Town Water Supply and Sanitation (WSS) project will provide climate resilient water supply and sanitation to over 26,500 residents of Zobue and up to 270,000 cross-border travellers per year. It will improve health and hygiene, reduce waterborne diseases, provide economic opportunities and build resilience to climate change.

INVESTMENT REQUEST

£2.65 million of grant funding to upgrade and expand the bulk water abstraction, treatment and distribution system.

PROJECT SUMMARY

Zobue Town is strategically located on the North–South Transport Corridor, and links with the Nacala Transport Corridor, connecting South Africa, Botswana and Zimbabwe to Malawi and Mozambique. The corridor development is prioritised in the Southern African Development Community (SADC) Regional Master Plan (2012–2027) and is critical to enhancing regional and international trade competitiveness in Mozambique. SADC has identified the Zobue–Mwanza border for the development of a one-stop border post (OSBP); both the town and trade flows are therefore expected to grow.

The Zobue Water Supply and Sanitation Project, and the parallel project in Mwanza, aim to promote transboundary cooperation between Mozambique and Malawi and increased climate resilience to deliver significant social and health impacts. The project will deliver economic benefits with a positive economic benefit–cost ratio. If a grant is provided for capital expenditure, revenues support operation and maintenance (O&M) for the first five years. After this, gradual tariff adjustments will be required to ensure financial sustainability.

The project is part of a wider CRIDF initiative to support climate resilient WSS infrastructure at the SADC strategic border posts.

MAIN SPONSORS



KEY FACTS

Water infrastructure type	Boreholes, reservoir, distribution network, toilet blocks
Country, location	Zobue, Tete Province, Mozambique
Main sponsor(s)	Water and Sanitation Infrastructures Administration (AIAS)
Financing requirement – capital expenditure	£2.65 million
Financing requirement – project preparation	£430,000
Financial instrument(s)	Grant funding

DEVELOPMENT IMPACT

- Water for 26,500 people in Zobue and up to 270,000 cross-border travelers.
- Improved health and hygiene and reduction of waterborne diseases.
- Economic benefits for women through time saved on water collection and widened scope of entrepreneurial activities.
- Strengthened climate resilience of the Zobue population.



SOCIAL ISSUES

- Mozambique is one of the poorest countries in the world and amongst the most unequal in Africa.
- 46% of the country and 42% of Tete Province live below the poverty line and the number in extreme poverty is rising.
- Zobue's population is predicted to grow from 26,500 to 66,000 by 2038.
- Livelihoods are centred on trade and commerce, agriculture, livestock, public service and non-governmental social development outreach.
- Commercial sex workers at the border post cause high levels of HIV/AIDs and sexually transmitted infections.
- The water supply comprises communal hand-pump boreholes, shallow hand-dug wells, and rivers and seasonal streams that are unprotected and untreated.

- Women walk 1 km to collect water, and during the dry season face water shortages, long queue times, night-time collections (3am–4am) and use of unprotected water sources.
- A WSS scheme funded by the UK Department for International Development (DFID) and Unicef was recently completed and will supply 56% of residents. The rest of the population remain unconnected.
- Of the three schools, one has no access to water and two share a borehole with the community and experience water shortages. Children are required to collect water for school use during school time.
- There is no waterborne sewerage system. Traditional pit latrines and ventilated improved pit (VIP) latrines are used. Open defecation and urination are common.
- In Mozambique, 17% of children under five die because of poor water and sanitation.
- In Zobue, malaria, diarrhoea and dysentery are the most prevalent diseases; they are all water related.



TECHNICAL

The average annual daily water demand for Zobue is 2,171 m³/d, rising to 5,870 m³/d by 2038. To meet this, the project will provide immediate sanitation measures and build upon the DFID/UNICEF-funded WSS development through the following:

- Drilling and testing new boreholes to meet demand.
- Installing submersible pumps and electrical connections.
- Constructing a new 6,000 m³ reservoir.
- Installing a pumping main line of 4 km from the 6,000 m³ water pump to the reservoirs.
- Constructing a pumping main line (4 km) and distribution main network (10km).
- Constructing two VIP toilet blocks at the market area, and two VIP toilet blocks at Sanjica Primary School.
- Constructing a new flush toilet block, a septic tank and a soakaway pit at Zobue Border Post.



INSTITUTIONAL AND LEGAL

- AIAS, the Water Infrastructure and Sanitation Administration, is responsible for ensuring that suitable water supply and sanitation operating arrangements

are put in place. AIAS will act as the asset owner, on behalf of the Mozambican government.

- Under the Mozambican system, AIAS will lease the operation, maintenance and management of the infrastructure to a private operator. This includes revenue collection and financial management.
- Potential operators include those from existing AIAS schemes, enabling streamlined operations.
- Service provision is regulated by the Autoridade Reguladora de Aguas, who approve the scheme-specific tariff and set performance targets.
- The District Services of Planning and Infrastructure and the district council are key stakeholders and should be consulted early to secure approvals.



MARKET AND END USERS

- The end-user customer base includes households, small businesses, schools and healthcare clinics.
- Tariffs are low. Financial sustainability will require tariff adjustment and affordability as part of the financing plan.
- There is a willingness to pay for an improved service that is reliable all year round.



CLIMATE AND ENVIRONMENT

- Mozambique and Tete Province suffer frequent extreme events including droughts, cyclones and floods. Mozambique has been ranked the most climate-affected country in Africa.
- The climate change risk assessment shows that higher temperatures, more intense dry spells and more frequent droughts are anticipated.
- Food shortages and water security will worsen and health will deteriorate. Impacts will be exacerbated by increasing population growth, traveller numbers and water demand as the OSBP is developed.
- Securing a safe and reliable water supply will increase resilience, reducing vulnerability to illness, poor hygiene and food insecurity.
- The feasibility study made recommendations to ensure the infrastructure is climate resilient, which will be developed at the design stage.
- The environmental assessment shows that positive impacts of the project are greater than the negative, and smaller negative impacts can be managed.

What is CRIDF?

The Climate Resilient Infrastructure Development Facility (CRIDF) is a UK Aid-funded programme. A major aim of CRIDF is to work with governments, businesses and other organisations in the Southern African Development Community to scope and design key transboundary water projects using best practice in order to ensure that these projects are both pro-poor, and fundable/bankable investment opportunities. Work ranges from detailed technical inputs and project preparation, to policy work that aims to change thinking.

For further information, please contact Sharmala Naidoo: sharmala.naidoo@cridf.com or enquiries@cridf.com

CRIDF

