

Ressano Garcia Border Town Water Supply and Sanitation

MARCH 2020

OVERVIEW

This project will provide climate resilient water supply and sanitation (WSS) to over 11,200 residents and up to 1 million cross-border travellers per year. It will improve health and hygiene, provide economic opportunities and build resilience to climate change.

INVESTMENT REQUEST

£3.05 million of grant funding to upgrade bulk abstraction, treatment and distribution.

PROJECT SUMMARY

Ressano Garcia is strategically located on the Maputo Transport Corridor linking South Africa, Zimbabwe, Swaziland and Botswana. It is one of the busiest border posts in the Southern African Development Community (SADC), clearing millions of tonnes of road and rail freight each year. It enables SADC businesses to access markets in India, China and elsewhere via the Port of Maputo. Corridor development is prioritised in SADC's Regional Master Plan (2012–2027) and is critical to enhancing Mozambique's regional and international trade. With the upgraded Ressano Garcia–Lembobo one-stop border post (OSBP) partially operating, both the town and trade flows are expected to grow.

The Ressano Garcia WSS project promotes transboundary cooperation between Mozambique and South Africa and increased climate resilience to deliver significant social and health impacts. The project will provide good economic benefits and a positive economic benefit–cost ratio. A grant will be required for capital costs, and tariff adjustments will be required to ensure the project is operationally sustainable.

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

MAIN SPONSORS



KEY FACTS

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| Water infrastructure type | Piped water supply including bulk abstraction, treatment, storage and distribution |
| Country, location | Ressano Garcia, Maputo Province, Mozambique |
| Main sponsor(s) | Water and Sanitation Infrastructures Administration (AIAS) |
| Financing requirement – capital expenditure | £3.05 million |
| Financing requirement – project preparation | £300,000 |
| Financial instrument(s) | Grant funding |

DEVELOPMENT IMPACT

- Strengthened climate resilience of the Ressano Garcia town population.
- Water provision to 11,200 residents and up to 1 million cross-border travellers.
- Reduced waterborne diseases and cross-border transmission.
- Economic benefits for women through time savings in water collection and widened scope of entrepreneurial activities.



SOCIAL ISSUES

- Ressano Garcia's population is predicted to double to 22,000 by 2038.
- Livelihoods are centred on informal vending and trade, and a large number of people cross the border to work in South African mines. Unemployment is high.
- Water provision varies widely by location. There are six independent water supply systems, four private and two public.
- For communities in high-lying areas, low pressure is a major problem, and they are forced to pay twice as much. Many are too poor to afford water from the privately owned schemes.
- All five schools have a water supply but these are unreliable or saline, so children carry their own water to school.
- There is no waterborne sewerage system; traditional pit latrines are most common.
- There are around 100 cases of waterborne diseases per month in the town.

TECHNICAL

The current water demand for Ressano Garcia is 949 m³/d, which could rise to 2,427 m³/d by 2038. To meet this, the project will upgrade the WSS system by:

- Constructing a new abstraction structure and low lift pumps.
- Constructing a new 1.6 Ml/d conventional water treatment works.
- Constructing a new bulk distribution pipeline (1.6 km) and primary distribution system (11 km).
- Installing additional ground and elevated storage tanks (combined capacity 2.2 Ml).
- Constructing 6 toilets, 2 urinals and 14 showers at the border post, formal and informal marketplaces and one primary school.

INSTITUTIONAL AND LEGAL

- AIAS are responsible for ensuring that suitable WSS operating arrangements are put in place. AIAS will act as the asset owners on behalf of the Mozambican government, who are the ultimate owners.
- Under the Mozambican system, AIAS will lease the operation, maintenance and management of the

infrastructure and services to a private operator. This includes revenue collection and financial management.

- The public–private process encourages the ongoing participation of informal private operators, though their role is not guaranteed.
- Service provision is regulated by the Water Regulatory Authority. They will approve the scheme-specific tariffs and set performance targets for the operators.
- The District Services of Planning and Infrastructure and Moamba District Council are also key stakeholders and should be consulted early to secure approvals.
- The current operators and district agencies require capacity development on quality monitoring.

MARKET AND END USERS

- The end-user customer base is households, small businesses, and government and public institutions such as schools and healthcare clinics.
- Tariffs are low. To ensure financial sustainability, tariff adjustment and affordability should be considered as part of the financing plan.
- There is evidence of willingness to pay for an improved service that is reliable and safe.

CLIMATE AND ENVIRONMENT

- Temperatures are variable and rainfall is low in Ressano Garcia, with the rainy season commencing later each year and dry spells lasting longer.
- Mozambique has been ranked the most climate-affected country in Africa. Maputo Province suffers frequent extreme events including droughts, cyclones and floods.
- The climate change risk assessment projects higher temperatures, variable precipitation, more frequent droughts and floods and more intense cyclones.
- The feasibility study incorporated design recommendations to ensure the infrastructure is climate resilient, which will be developed in the detailed design stage.
- The environmental assessment showed that positive impacts are greater than the negative and proposed measures to mitigate smaller negative impacts.

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.

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