

Mandimba Border Town Water Supply and Sanitation

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OVERVIEW

The project will provide climate-resilient water supply and sanitation to over 27,000 residents of Mandimba, Mozambique, and 30,000 cross-border travellers. It will improve health and hygiene, reduce waterborne diseases, provide economic opportunities and build resilience to climate change.

INVESTMENT REQUEST

£4.5 million of grant funding to upgrade and expand the water supply and sanitation system.

PROJECT SUMMARY

Mandimba in Mozambique is strategically located on the Nacala Transport Corridor linking Mozambique, Malawi and Tanzania to the Port of Beira, and also to the North–South Transport Corridor. 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. SADC has identified the Mandimba–Chiponde border for the development of a one-stop border post (OSBP) and related road network and related upgrades, therefore both the town and trade flows are expected to grow.

The Mandimba WSS project will expand and upgrade the existing WSS system. Together with a parallel project in Chiponde, it aims to promote transboundary cooperation between Mozambique and Malawi and increased resilience for the Mandimba population. The initiative will deliver significant social and health impacts and is economically viable, with a positive economic benefit–cost ratio. The revenue generated from the system will be sufficient to support operational costs as long as tariffs can be gradually increased.

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

MAIN SPONSORS



KEY FACTS

Water infrastructure type	Piped water supply and abluion construction
Country, location	Mandimba, Niassa Province, Mozambique
Main sponsor(s)	Water and Sanitation Infrastructure Administration (AIAS)
Financing requirement – capital expenditure	£4.5 million
Financing requirement – project preparation	£675,000
Financial instrument(s)	Grant funding

DEVELOPMENT IMPACT

- Water and sanitation provision for 27,734 people in Mandimba and 30,000 cross-border travellers.
- Water supply to five schools and four clinics.
- Improved hygiene and sanitation 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 Mandimba population.



SOCIAL ISSUES

- Mozambique is one of the poorest countries in the world, and 56% of people in Niassa Province are extremely poor.
- Economic activities in Mandimba are limited; agriculture, commerce and public service are the main opportunities. 75% of the agricultural workforce are women.
- Cross-border trade at Mandimba is largely informal and undertaken by women.
- Transactional sex between truck drivers and long-distance travellers and economically challenged young women has increased.
- 30% of the population do not have a potable water supply; those that do use an old and inadequate system with common water shortages, severe overcrowding at water points, and long waiting times.
- Waterborne diseases such as diarrhoea and dysentery are prevalent.
- There is no waterborne sewage system and pit latrines have a very poor level of hygiene.

TECHNICAL

The average annual daily water demand for Mandimba is 2,620 m³/d, rising to 7,460 m³/d by 2038. To meet this, the project proposes to expand and upgrade the existing bulk water abstraction, treatment and distribution system through the following:

- Drilling new boreholes at Ntondoco District and installing submersible pumps (the number of boreholes to be determined through geohydrological assessment).
- Constructing a new pumping main (34 km) and distribution lines (38 km).
- Constructing a new storage tank (7,580 m³).
- Constructing and rehabilitating ventilated improved pit latrine toilet blocks in the Mandimba market area, in three schools and at the border post.

INSTITUTIONAL AND LEGAL

- AIAS is responsible for ensuring that suitable water supply and sanitation operating arrangements are

put in place. AIAS will act as the asset owners on behalf of the Mozambican government, which is the ultimate owner.

- AIAS will lease the operation, maintenance and management of the infrastructure and services to a private operator, in accordance with the AIAS Delegated Management Framework. This includes revenue collection and financial management.
- Autoridade Reguladora de Aguas is the regulator and will approve tariffs and set and monitor service performance and water quality targets.
- The District Services of Planning and Infrastructures and the municipal council are also key stakeholders and will be consulted early to secure approvals.

MARKET AND END USERS

- The end-user customer base includes households, schools, health clinics, small traders and other government services such as the police and immigration offices.
- Tariffs are low. To ensure financial sustainability, tariff adjustment and affordability will be considered as part of the financing plan.
- There is a strong willingness to pay for an improved, reliable and safe water supply.

CLIMATE AND ENVIRONMENT

- The climate change risk assessment predicts more frequent droughts, less stable rainfall regimes and a recurrence of dry spells in Mandimba.
- Population growth and increasing traveller numbers will exacerbate pressures on already low borehole yields, and recharge through rainfall infiltration to the aquifer will potentially decrease.
- The project will increase resilience by securing a safe and reliable water supply under future climatic conditions – improving health and hygiene, and reducing food insecurity.
- The environmental impact assessment shows that the project offers greater positive than negative impacts and proposes appropriate mitigation measures.

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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