

Chiponde Border Town Water Supply and Sanitation

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OVERVIEW

The Chiponde Border Town Water Supply and Sanitation Project will provide water supply and sanitation (WSS) to 7,300 Chiponde residents and 30,000 cross-border travellers per year. The project will build climate resilience, improve health, reduce waterborne diseases and stimulate economic opportunities.

INVESTMENT REQUEST

£1.8 million in grant funding for upgrading and expansion of the water supply and sanitation system.

PROJECT SUMMARY

Chiponde in Malawi is strategically located on the Nacala Transport Corridor servicing Mozambique, Malawi and Tanzania. 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, particularly for landlocked countries such as Malawi. SADC has identified the Chiponde–Mandimba border for the development of a one stop border post (OSBP) and related upgrades, therefore both the town and trade flows are expected to grow.

The Chiponde WSS project will expand and upgrade the existing WSS system. Together with a parallel project in Mandimba, it aims to promote transboundary cooperation between Malawi and Mozambique and increase resilience for the Chiponde 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.

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 including boreholes, pumping, storage, distribution, and ablutions
Country, location	Chiponde, Mangochi District, Malawi
Main sponsor(s)	Southern Region Water Board (SRWB)
Financing requirement – capital expenditure	£1.8 million
Financing requirement – project preparation	£378,000
Financial instrument(s)	Grant funding

DEVELOPMENT IMPACT

- Water provision to 7,000 people in Chiponde and 30,000 cross-border travellers and traders per year.
- Improved hygiene and reduction of waterborne diseases.
- Strengthened climate resilience of the Chiponde population.
- Economic benefits for women through time saving on water collection and widened scope of entrepreneurial activities.



Photo: Communications for Development

SOCIAL ISSUES

- Malawi is one of the poorest countries in the world: 50% of the population are classified as poor and 25% live in extreme poverty. In Mangochi District, 60% of the population live below the poverty line.
- The Chiponde population is predominantly young and female: 53% of residents are female and 58% are under 19 years old. Illiteracy is high and formal employment low.
- Livelihoods in Chiponde are centred on subsistence farming, livestock and informal business activities.
- Transactional sex between truck drivers and long-distance travellers and young women is common. Gender-based violence towards female informal traders also occurs.
- Cross-border traders often wait days for processing, without access to water.
- Only 8% of the population have access to piped water; the majority use communal water points, a well or the river.
- There is no waterborne sewage system and 90% of residents use traditional pit latrines, including in schools and health clinics. Open defecation is common. Diarrhoea and dysentery are prevalent and increasing, especially amongst children. The area is a cholera hotspot.
- All three Chiponde schools share hand pumps and boreholes with the community, resulting in conflict between students and residents. The pumps do not function when the schools cannot afford maintenance costs.
- Water supply infrastructure at the health clinic is old, inadequate and affects the quality of health services.

TECHNICAL

The average annual daily water demand for Chiponde is 535 m³/d, rising to 1,130 m³/d by 2038. To meet this, the project will expand and upgrade the existing water abstraction, treatment and distribution system through the following:

- Drilling productive boreholes to meet a peak demand of 133 m³/h (number of boreholes to be confirmed upon geohydrological study).

- Constructing a new pumping main line (3 km) and distribution lines (14 km).
- Constructing a new storage tank (1,420 m³).
- Constructing two ventilated improved pit latrine blocks for public use in the market centre and flush toilet facilities at the border post.

INSTITUTIONAL AND LEGAL

- Water supply was previously managed by a water-user association and is transitioning to the SRWB.
- SRWB, the project sponsor, will own the infrastructure and be responsible for O&M, the costs of which are predicted to be sufficiently supported by the revenue.
- Mangochi District Council and the District Executive Committee will remain central stakeholders.
- Should the government set affordable tariff levels and collection rates remain high, SRWB will be able to maintain good service provision.

MARKET AND END USERS

- The end-user customer base includes 1,700 households, government offices, border post buildings, traders at Chiponde market centre and two schools.

CLIMATE AND ENVIRONMENT

- More frequent droughts, less predictable rainfall and a recurrence of dry spells are projected for Chiponde.
- The increase in prolonged dry spells will negatively impact the already low borehole yields, which will be exacerbated by increasing demand as the OSBP is enhanced in line with plans for the African North–South Corridor.
- 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.

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

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