

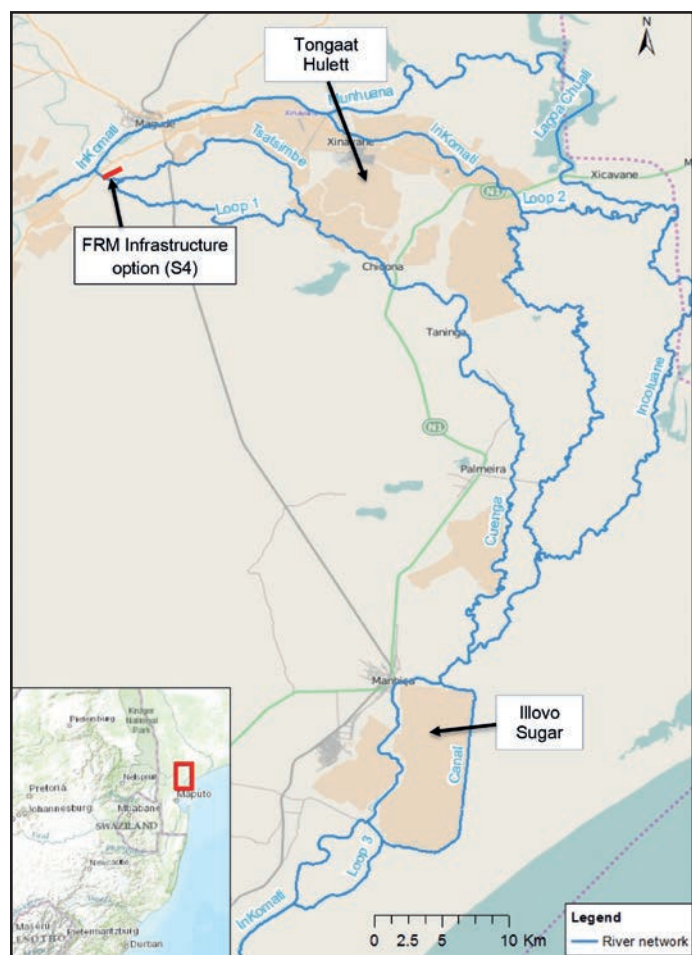
Incomati Flood Risk Management (FRM) Project

AUGUST 2018

The Project will reduce flood and drought vulnerability for outgrowers, small farmers and 50,000 households in the Lower Incomati floodplain in Mozambique. The Early Warning Flood Forecasting System component will also benefit eSwatini and South Africa. The project will also improve climate resilience along the supply chains of the resident sugar companies.

INVESTMENT REQUEST

Up to **£6 million** grant funding for the outstanding feasibility studies, detailed design and construction related to the proposed flood risk management infrastructure.



Key facts

Water infrastructure type	Flood risk management (flood embankment with sluice gates to control the direction of flow for both flooding and low flows)
Country(ies), location	Mozambique
Transboundary basin	Inco-Maputo Basin
Main sponsor(s)	Private sector: Tongaat Hulett and Illovo Sugar Public sector: ARA-Sul (Government authority responsible for the operation and management of the Incomati River in Mozambique) and INIR (National Institute for Irrigation in Mozambique)

Development impact	<ul style="list-style-type: none"> ■ Reduced flood vulnerability for outgrowers, small holder farmers and over 50,000 households ■ Increased climate resilience with commensurate socio-economic benefits for all parties ■ Reduced flood risks and damage for outgrowers, and small holder farmers in terms of agricultural value chains ■ Improved daily water resources management
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Financing requirement – capital expenditure	Estimated £6 million
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Financing requirement – project preparation	£1.4 million grant, 85% recoverable through the PPP arrangements
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Co-funding secured	<ul style="list-style-type: none"> ■ Tongaat Hulett and Illovo: In-principle commitment for 85% of the project, up to a total of £1.4 million ■ CRIDF: £0.5 million for pre-feasibility studies (2014–2017), for the steering committee and the transboundary Early Warning Flood Forecast system (EWFFS). The EWFFS tool supports the operating rules for the proposed FRM infrastructure
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INVESTMENT SUMMARY

Financing plan:

- Additional feasibility studies: geotechnical investigation, environmental and social studies, localised flood resilience design measures, environmental licence and permits.

INVESTMENT SUMMARY CONTINUED...

- Detailed infrastructure design phase: design of sluice gate, flood embankment etc.
- Procurement process, appointment of contractor and construction with handover to the operator – ARA-Sul.
- Development of operating rules.
- Institutional arrangements per project life cycle phase.
- Enhancing livelihoods components and gender and social inclusion impacts.

Value proposition:

- Sugar cane and subsistence farming remains a significant contributor to poverty alleviation within the Lower Incomati floodplain.
- The floodplain has experienced several severe floods and droughts over recent decades, with increasing frequency and intensity and devastating impacts.
- The project will significantly reduce flood vulnerability for over 250,000 people in the Basin. The infrastructure can also be used to optimise daily water resources management allocation.
- The project brings together the public and private sectors with innovations at watershed and value chain levels, contributing to flood risk management and ecologically sound water management.

 MARKET/END-USERS

- The estimated annual costs avoided by implementing the infrastructure for a 1 in 10-year flood event amount to at least £21 million. The annual cost requirement for the infrastructure is £47,000 per year. The benefits that can be realised through the project far exceed the annual costs with a Cost Benefit Ratio (CBR) of at least 4.5.

 TECHNICAL

- CRIDF has completed the engineering and social pre-feasibility studies including a 2-dimensional hydraulic model, proving the benefits of the project.

The infrastructure solution includes a flood embankment with sluice gates to control the direction of flow for both flooding and low flows. The structure will have the ability to divert water from the Incomati River to the Cuenga River/Channel during flood events and reduces some of the flooding impacts further down the Basin. During normal flow conditions, releases will be made for environmental purposes, to enhance water quality and for irrigation flows down the Cuenga River. This can potentially be attained by the development of operating rules that permit flexible releases designed to achieve these purposes. For example, the diversion of water into the Cuenga can be utilised to enhance water quality during extensive dry periods.

 INSTITUTIONAL AND LEGAL ARRANGEMENTS

- An MoU detailing the financial commitments and roles and responsibilities of the parties is currently being reviewed for signature. The private sector co-financiers are Tongaat Hulett and Illovo Sugar and the public-sector partners are ARA-Sul and INIR.

 SOCIAL ISSUES

- The livelihoods resilience and capacity building components address the needs of outgrower and subsistence farmers in the Basin. This includes the development of rural advisory services, training on sustainable agriculture practices, the development of outgrower strategies for different areas within the Basin, small scale localised flood risk interventions and improving access to pertinent information.

 ENVIRONMENTAL ISSUES

- As per Mozambican legislation, Environmental and Social Impacts Assessment (ESIA) and Environmental and Social Management Plan (ESMP) with stakeholder consultations will be required.

What is CRIDF?

The Climate Resilient Infrastructure Development Facility (CRIDF), UK Aid-funded programme. A major aim of CRIDF is to work with governments, businesses and other organisations in the Southern African Region to scope and design key transboundary water projects using best practice in order to ensure that they 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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