

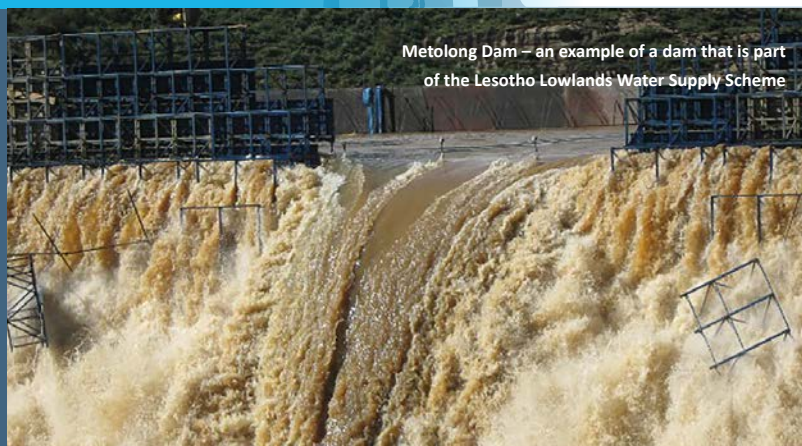
Lesotho-Botswana Water Transfer (L-BWT) Scheme

AUGUST 2018

The L-BWT scheme will supply water to Botswana, Lesotho and South Africa from the Makhaleng Dam – part of the Lesotho Lowlands Water Supply Scheme – through a 700 km water conveyance pipeline from Lesotho, through South Africa, to Botswana.

INVESTMENT REQUEST

€3.42 million grant funding for outstanding feasibility studies related to the dam and conveyancing pipeline.



Metolong Dam – an example of a dam that is part of the Lesotho Lowlands Water Supply Scheme

Key facts

Water infrastructure type	Bulk water supply, hydropower
Country(ies), location	Botswana, Lesotho and South Africa
Region	Southern Africa
Transboundary basin	Orange-Senqu Basin
Main sponsor(s)	The Orange-Senqu River Commission (ORASECOM), on behalf of the governments of Republic of Botswana, the Kingdom of Lesotho, Republic of Namibia and the Republic of South Africa
Expected development impacts	<ul style="list-style-type: none">■ Increased climate resilience and long-term security of water supply for communities in Botswana, Lesotho and South Africa, with commensurate socio-economic benefits■ Electricity generation from hydropower (optional, subject to study outcomes)■ Revenue generation for Lesotho■ Increased land under irrigation with commensurate food security in Lesotho
Financing requirement – capital expenditure	TBC
Financing requirement – project preparation	€3.42 million grant (funding gap)
Co-funding secured	<ul style="list-style-type: none">■ The World Bank provided US\$2 million grant funding in 2015 for a desk-top study of the L-BWT scheme■ The African Development Bank (AfDB) provided a €2,100,000 grant for the technical prefeasibility of the entire system (dam and conveyancing pipeline) and the feasibility of the dam in Lesotho■ The Stockholm International Water Institute (SIWI) and the Climate Resilient Infrastructure Development Facility (CRIDF) will support the prefeasibility institutional and financial studies■ Global Water Partnership Southern Africa (GWP-SA) will support the project capacity building requirements with €170,000 (cash and in-kind)■ ORASECOM will provide €171,360 (cash and in-kind)■ The governments of Botswana, Lesotho and South Africa will initially provide €61,740 (cash and in-kind)



Republic of Botswana



Kingdom of Lesotho



Republic of South Africa

INVESTMENT SUMMARY

- The L-BWT will address critical water needs in the two largest economies in the region – Botswana is predicted to run out of water by 2025 if new water sources are not found and the proposed water conveyance system will pass through areas in South Africa where there are unmet water needs.
- The Orange-Senqu Basin is already of major economic importance to South Africa and Lesotho, contributing approximately 26% and 100%, respectively, to each country’s GDP.
- Key development finance institutions (the World Bank and the African Development Bank) will ensure the project is well prepared in all aspects.

Financing needs	EUR (000)
Prefeasibility and feasibility studies (dam and water conveyance system)	533.32
Environmental and Social Impact Assessment & Management Plan and Resettlement Action Plan	1,420.00
Technical feasibility of the dam in Lesotho	685.36
Technical feasibility of the water conveyance system (water pipeline)	2,000.00
Prefeasibility level of Institutional and Financial structure	200.00
Feasibility-level of Institutional and Financial structure	600.00
Expert review of studies related to the dam, tunnelling and piping	250.00
TOTAL	5,688.68

MARKET/END-USERS

- Water will be supplied to local water suppliers, with initial studies indicating main demand likely from Botswana, followed by South Africa. Demand estimates will be a key focus of the feasibility studies.

- The potential for hydropower generation in Lesotho and South Africa will be explored for power supply into the Southern Africa Power Pool system.
- Water is subsidised to different degrees in all three countries, through various mechanisms, including cross-subsidisation, free basic water provision and less-than-cost recovery. The cost-effectiveness of delivery will be a critical success factor for the project.

TECHNICAL

- The feasibility study is focused on the preferred option of building a new dam on the Makhaleng river in Lesotho, and the pipeline. The desk-top study identified route options for the conveyance system. The prefeasibility study, currently underway, will examine the preferred option to be recommended for the full feasibility study.

INSTITUTIONAL AND LEGAL ARRANGEMENTS

- Institutional options will be explored during the current prefeasibility phase of the project and will be refined during the feasibility stage. The sponsoring governments have experience in establishing special purpose vehicles for similarly large infrastructure projects.

SOCIAL AND ENVIRONMENTAL ISSUES

- The project is classified as high impact (African Development Bank safeguards system level 1, World Bank Category A), requiring a full social and environmental impact assessment, including under the laws of the sponsoring countries. The governments of Lesotho and South Africa’s safeguard systems have been tested through the Lesotho Highlands Water Project, which involved the construction of dams, a hydropower station and associated infrastructure, O&M and the requisite relocation and settlement programmes.

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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