

Zambia Chanyanya

Developing a ground-breaking cooperative irrigation project to improve food supply in Zambia



PIDG PROJECT FACT SHEET INNOVATION  



Chanyanya | Zambia | With Chanyanya Smallholders Cooperative Society (CSCS)

Ground-breaking irrigation project

148ha
irrigated farmland

1,033 people
with new and improved access to infrastructure

The first cooperative irrigation scheme of its kind in Africa

Pooling smallhold land to deliver the benefits of commercial-scale irrigation for the people of Chanyanya



Harnessing the Kafue River to irrigate Chanyanya's farmland

Chanyanya applies a ground-breaking irrigation model to smallhold and commercial farm land, increasing agricultural productivity in Zambia.



Working together to deliver food security

Chanyanya's smallhold farmers rely upon subsistence farming and are vulnerable to fluctuating rainfall. The Chanyanya project enabled 126 smallhold farmers and four commercial farmers to pool land, making commercial-scale irrigation viable. Smallhold farmers share in the 148ha commercial farm's profits and have irrigated market garden plots from which they derive income and food security.



From innovative concept to successful implementation

PIDG company InfraCo Africa conceived the Chanyanya pilot project to develop the innovative cooperative irrigation model for future scale-up. InfraCo Africa invested US\$1.1m, alongside US\$520,000 in funding from PIDG's Technical Assistance Facility (TAF), attracting further DFI investment to rigorously test the concept and demonstrate its efficacy for replication across the continent.



InfraCo Africa provides the risk capital and expertise needed to develop early-stage infrastructure projects into viable investment opportunities

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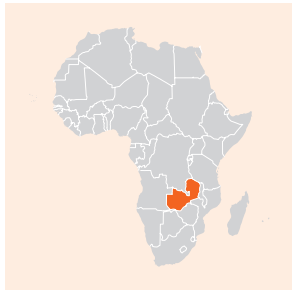





This case study is also included in the  Africa project fact sheet series.

Zambia Chanyanya

PIDG company InfraCo Africa invested in a pioneering cooperative irrigation scheme, boosting agricultural productivity in Zambia




Technology
agri-
infrastructure


Total
investment
US\$2.98m


Value of PIDG
investment
US\$1.62m


Number of people
benefiting
1,033

Context

Zambia's agricultural sector is dominated by smallhold farming. Smallhold farmers are vulnerable to fluctuating rainfall and many rural communities require access to food aid. The Government of Zambia has identified access to irrigation as a priority for maximising agricultural productivity.¹ Irrigated commercial farms can diversify crops, extend growing seasons and maximise yields. However, the scale of land held by individual smallholds (2-10ha) means that irrigation technology and mechanised farming methods are not economically viable.

Project

In the village of Chanyanya, 45km from the capital Lusaka, 126 smallhold farmers and four commercial farmers formed a cooperative to harness the irrigation potential of the Kafue River. Having secured water extraction rights, they approached InfraCo Africa, through its principal developer eleQtra, to develop a viable irrigation scheme. The project design involved pooling members' land to create an irrigated commercial farm and a pilot project was undertaken as a 'proof-of-concept.' The pilot established the Chanyanya Smallholders Cooperative Society (CSCS), pooling members' land to form a 148ha farm with four irrigation pivots and water extraction infrastructure. The farm grows wheat, barley and soya, training local employees in advanced farming

methods. In addition to receiving rent and dividends from the farm, each member has access to an irrigated market garden land, enabling them to grow vegetables for sale or domestic consumption.

Impact

***'It (Chanyanya project) is something that will bring returns, not just now but for generations to come.'*²**

Joseph Mushalika, Chairman, Chanyanya Smallholders Cooperative Society

The Chanyanya project provides reliable access to water for commercial crops, driving the profitability of the commercial farm and delivering returns for smallhold farmers. Once loans to the project are repaid, CSCS members will own the farm, irrigation technology and machinery outright. To expand CSCS governance capacity, the project employs a Social Development Officer. Cooperative members now derive increased income, food security and improved nutrition from their market garden plots. An agronomist trains smallhold farmers in new methods to maximise yields. InfraCo Africa's Chanyanya pilot project will roll out the model to three neighbouring communities, pooling the land of 600 smallholders and commercial farmers to irrigate 1,575ha of farmland. The model has considerable scope for replication. Lessons learnt from Chanyanya are informing the World Bank's Ghanaian and Zambian irrigation programmes.

- 1 www.gwp.org/Global/Activities/Impact%20Stories/Supporting%20documents/Revised%20Sixth%20National%20Development%20Plan.pdf
- 2 outu.be/LBC7Mz7khNc



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