



Zambia



Farmers in Zambia have such a spirit of optimism and potential that with the right irrigation technologies and practices they will be able to bring themselves out of subsistence farming.

-Alex Snelgrove, Project Manager

Business Growth

Background

With parched land and few resources, subsistence farmers in Zambia struggle to grow enough food to feed their families, let alone sell fruits and vegetables to increase household income. Farmers understand the need for irrigation, yet without the required capital they simply cannot invest in improved practices and technologies. Many farmers resort to flood irrigation, which results in lower yields and the disastrous environmental impact of soil erosion, flooding and water loss.

There are more effective irrigation technologies available, but poverty and aversion to risk make farmers reluctant to try them. Efficient water technologies will give these farmers an opportunity to increase crop production and work towards economic independence.

MEDA's Assessment

Drip irrigation, and treadle pumps are effective, but distribution to smaller holder farms is impeded by capital cost and ineffective technology distribution channels. Few farmers are willing to put up the capital without knowing the benefits; they simply cannot take the risk. And if there is no demand, shop keepers are not willing to stock the irrigation equipment, leaving no access for the future.

Consequently, most farmers default to traditional irrigation techniques, resulting in continued low production. By expanding access to new irrigation technologies, poor farmers in Zambia can increase their production in a sustainable way and generate more income.

MEDA's experience from Tanzania shows that providing discount certificates encourages farmers to invest in a new technology, which in turn provides the incentive for shop keepers to stock and sell the needed equipment. While some NGOs have distributed free irrigation technology, there are

Technology

Drip irrigation systems are a simple but revolutionary technology for Zambian farmers. The basic principle consists of a reservoir tank that collects and holds water. This water is stored on a high point, allowing gravity to feed the drip lines distributed throughout the field. The drip lines allow water to seep into the land, distributing it at the root instead of flooding. This provides the farmer with improved production and irrigation control.

few sales points for farmers interested in purchasing low-cost water technologies. When the technology is given away, manufacturers, wholesalers and retailers have no reason to carry the product.

MEDA with its partners will demonstrate the new irrigation technologies through mini agricultural fairs and information sessions. After attending these sessions, local farmers are entitled to a discount certificate on basic irrigation technology. Farmers are required to contribute the remaining amount through loans or savings. The recipients then take their certificate to one of a number of registered retail outlets to purchase the technology. Retailers submit redeemed certificates to water technology manufacturers in exchange for new inventory.

The discount certificates provide economic growth in several ways:

- Where possible, the irrigation technology is produced in the country of sale, offering employment to many people.
- Retail outlets are able to increase their income by selling the technology products.
- Farmers are able to increase their overall economic status by producing more profitable crops.

Outcome:

Economic growth in rural communities in Zambia will benefit through:

- *Discount certificates to facilitate purchase of irrigation systems*
- *Irrigation training and education*
- *The development of a strong retail distribution system*
- *Profitable market chains to maximize crop value*

Cost:

Canadian International Development Agency to provide: \$615,098

MEDA Contributor(s) provide: \$290,000