Mattias Phiri shows off his pigeon peas: "This crop is good because it can survive the droughts, which come more frequent and last longer than before. And it improves the soil." Photo by Tom Price/CRS

overview

SCALING PRODUCTION SYSTEMS FOOD SECURITY AND CLIMATE CHANGE ADAPTATION (SPFCA)

BACKGROUND

Like many other countries, Zambia has had more frequent and intense droughts in the last decade, leading to food, water, and energy insecurity, especially among the country's most vulnerable rural communities.

SPFCA is reducing the effects of climate change and contributing to increased incomes and improved soil fertility in the Chipata and Lundazi districts of Eastern Province by developing the value chain of drought-tolerant pigeon pea and planting Gliricidia. This project is possible thanks to a foundation established by the USAID-funded Mawa project (2012-2017) and additional funds from Bob Bartel.

QUICK FACTS	
Funder	Bob Bartel and CRS Private Funds
Project location	Chipata and Lundazi, Eastern Province
# of people served	5,000 households
Timeframe	2017-2019
Partners	Caritas Chipata, Ministry of Agriculture, World Food Program

STRATEGIC OBJECTIVES

Promote production, consumption, and marketing of pigeon pea.

Increase farmers' agricultural production and marketing skills.

Improve soil fertility in a sustainable way to reduce the effects of climate change.

CLIMATE SMART AGRICULTURE

Pigeon pea is drought-tolerant, edible, can be sold as a cash crop, and adds nitrogen to the soil, improving the soil's fertility for future planting seasons. The project also distributed Gliricidia seedlings to each farmer, a fast-growing tree that fixes nitrogen in the soil, prevents soil erosion, and provides enough vegetative cover, boosting crop yields when used for intercropping.

PROJECT HIGHLIGHT

HARNESSING POWER OF TECHNOLOGY TO LINK SMALLHOLDER FARMERS TO MARKETS.

To increase incomes, farmers need to be linked to commodity buyers or markets. In partnership with the World Food Program, SPFCA is implementing a new Virtual Farmers Market (VFM) mobile application through Whatsapp to connect rural smallholder farmers to potential buyers, facilitating communication and trade.

The drought-resistant pigeon pea rode out a long dry spell in January this year during what should be the rainy season. Pigeon pea provides nutrition to the soil and ground cover that traps vital moisture. Photo by Tom Price/CRS

ACCOMPLISHMENTS*

*As of March 2019

4,597 farmer participants in Chipata and Lundazi.

Each farmer was given 5 kg of certified pigeon pea seeds to cover half an hectare. **74%** of the farmers planted pigeon peas.

On average, farmers **planted 3kg** and **harvested 60 kg** of pigeon peas.

The **average income** from selling the pigeon peas was **K420**.

200 farmers were selected to participate in Gliricidia intercropping and received 60 seedlings. **100%** of the farmers planted the Gliricidia seedlings.

86% of the farmers **attended training** on Land Preparation and Planting, and Integrated Pest Management.

SUSTAINABILITY OF PROJECT

Agricultural Development Agents (ADAs) – Lead farmers from within the communities. The project worked with 21 lead farmers, or ADAs, in the communities where the beneficiaries were located. ADAs mobilized their communities for farmer recruitment and registration, training, and distribution of seeds, seedlings, and agro-chemicals.

Local supply of agro-chemicals. Instead of the project procuring and distributing chemicals to the farmers, it negotiated with a local agro-input supplier to supply the chemicals on a cash basis through ADAs.

Agricultural training in partnership with Grassroots Trust to increase knowledge of pigeon pea. Given that pigeon pea is a new crop in the area, farmers received training on crop production techniques, including land preparation and planting, integrated pest management, and harvesting and post-harvesting management.

Determination of the best variety of pigeon pea for the area. Partnered with the Zambia Agricultural Research Institute to determine the best variety of pigeon pea in terms of yield, soil fertility improvement, and tolerance to pests, diseases and droughts. Four varieties of pigeon peas were tested.

Plot No 377/A/43/C/2 Ibex Hill Road, PO Box 38086 Lusaka, Zambia.
For more information, contact Douglas Mwasi at douglas.mwasi@crs.org.