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## Introduction

This project seeks to strengthen the value chain for fresh market fruits and vegetables in sub-Saharan Africa with a focus on post-harvest handling and distribution. Building upon the successful introduction of local commercial vegetables and herbs in the southern Zambian Livingstone region, using a market-first science driven approach, this proposal will expand local and regional production of fresh vegetables, herbs and selected fruits for the tourism and supermarket industries and reduce post harvest loss. A major constraint to scaling-up is in the regional lack of effective cold chain systems to preserve and extend shelf life, reduce losses after harvest and to maintain high quality produce from harvest through post-harvest and produce delivery. This will be accomplished using an innovative, market-first and science driven approach with a focus on applied post-harvest technologies. Farmers will be trained in good agricultural management practices, post-harvest and storage systems, entrepreneurship, and linked to sustainable markets. Innovative technologies including low cost affordable coolers, quality control in post-harvest technology, appropriate cold storage systems, and construction of post-harvest cooling units for product storage at the farm or cooperative as well as throughout distribution and delivery will be promoted.

This project builds upon strong private sector partnerships with buyers that have asked us to work with them to procure local and regional produce of high quality to minimize importations and to create local income generating opportunities. Our private sector buyers and partners include the Sun International Hotels (Zambezi Sun & Royal Sun), David Livingstone Hotel, Chrismar Hotel, other lodges and Freshmark/Shoprite & SPAR supermarkets.

### Selected Highlights:

\*360 females and 240 males trained on good agricultural practices to increase quality and quantity of produce; and With trainings/workshops held on postharvest handling, technologies and practices to reduce post-harvest losses;

\*10% of famers (lead farmers) of which 50% are women obtaining entrepreneurship training;

\*On farm training on the production of vegetable seedlings using greenhouse technology was conducted and 160,000 seedlings were produced and sold to the value of \$28,800;

\*A total of 542 tons of fruit and vegetable were produced and supplied to Hotels, Supermarkets and Lodges;

\*Crops sold to the Livingstone market reach 542 tons to the value of \$458,889.86.

\*One Coolbot has been constructed and now being tested in Livingstone; Shade roof being constructed above the CoolBot.

\*Two University of Zambia faculty and staff completed the online Post-Harvest Training Course and successfully completed their practicum at the Post-Harvest Center in Tanzania.

## Strengthening of Production



## Constructing a CoolBot in Zambia to assist Postharvest Handling of Fresh Vegetables, Nsongwe Women's Association



## Bringing it together: From Seed to Sales

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