

## Horticulture CRSP Project Report

### Sustainable Development of Horticultural Crops in Zambia for Food Security, Income Generation and in Support of the Tourism Industry

*Helping farmers in Zambia develop consistent vegetable products to market to hotels and other tourist industries.*

#### Lead Project Investigators:

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#### Project Summary

This project increased food security and generated income for rural farmers through quality production of vegetables. It has also project enabled communities to have access to appropriate germplasm and involved them in the production, post-harvest handling and commercialization of high value produce to diversify their incomes. Growers were introduced to and trained in greenhouse tunnel construction and systems to produce vegetables in open field and controlled greenhouse conditions. Access to information was an important component of this project. Farmers were trained not only in production and commercialization of fresh produce, but also on business skill development. This project impacted 135 farmers (59% women) from the communities in the Livingstone region to produce over 100 metric tons of vegetables valued of \$170,000. This project used a market-first science-based approach involving private sector buyers including the Zambezi Sun, Royal Sun, Spar and Shoprite supermarkets, David Livingstone Hotel, Chrismar Hotel and lodges in Livingstone.



Seedling production at Kazuni, near Livingstone, the production of high quality seedling has generated income for almost \$170,000 and provided superior germplasm to local farmers.

#### Project Objectives

1. To train farmers in vegetable production.
2. To increase production of high quality vegetables.
3. To ensure sustainability of the farmers' crop enterprises and assist them to approach horticulture production as an agri-business.

## Project Report Narrative

--Submitted by James E. Simon and Petrus Langenhoven

At the beginning of this project, we had planned that this project would impact 100 farmers (55% women) from the communities in the Livingstone to generate vegetable seedlings valued at \$125,000. At the end of this project, the farmers have generated nearly \$170,000. This project impacted more than 135 farmers (55 men and 80 women). Thus, we are pleased to report that this project exceeds our original goals for both total actual trade and number of farmers trained within this short-term project.

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Because of the good quality of seedlings that are being produced, more farmers have ordered seedlings from these communities, thus opening new longer-term sustainable business opportunities in this region to produce high quality vegetable transplants, and to offer a big market for the producers. The growers have been trained in due-diligence in food safety and marketing of vegetable and fruit and they recognize that high quality (disease free transplants produced at the right time, and offered at the correct growth stage) is essential for sales and marketing. Farmers have come to understand that farming needs to be viewed and practiced as an Agri-Business enterprise and that the relationships developed and partnerships formed can facilitate trade and increase their own business opportunities.

This project introduced several affordable technologies (high quality seeds and germplasm; plastic tunnels, water management), addressed key issues that were local and regional constraints in production (access to high quality plant materials and transplants) and led to successful business and income generation in a short time period. The project was based upon the development of strong partnerships (other commercial growers, real buyers and strong market demand in exactly what was done), introduction of technologies that overcame current commodity chain constraints, and along the way provided relevant trainings and capacity building. This project is poised to expand and scale-up.

### About Horticulture CRSP

Horticulture CRSP (funded by USAID under Award EPP-A-00-09-00004) provides funding to realize the opportunities of horticultural development, improve food security, improve nutrition and human health, provide opportunities for diversification of income, and advance economic and social conditions of the rural poor, particularly women. Horticulture CRSP is managed by the University of California, Davis and has nearly 30 projects in over 20 countries. For more information, visit: <http://hortcrsp.ucdavis.edu/>.

## Project Performance Indicators

	Project Achievements
<b>4.5.1 Agriculture Enabling Environment</b>	
Number of individuals who have received USG supported short-term agricultural enabling environment training - Female	80
Number of individuals who have received USG supported short-term agricultural enabling environment training - Male	55
<b>4.5.2 Agriculture Sector Productivity</b>	<b>Project Achievements</b>
Number of new technologies or management practices under research as a result of USG assistance.	5
Number of new technologies or management practices made available for transfer as a result of USG assistance.	5
Number of new technologies or management practices being field tested as a result of USG assistance.	10
Number of additional hectares under improved technologies or management practices as a result of USG assistance.	15
Number of rural households benefiting directly from USG interventions - Female Headed Household	40
Number of rural households benefiting directly from USG interventions - Male Headed Household	20
Number of agriculture-related firms benefiting directly from USG supported interventions.	10
Number of public-private partnerships formed as a result of USG assistance.	3
Number of individuals who have received USG supported short-term agricultural sector productivity or food security training - Female	80
Number of individuals who have received USG supported short-term agricultural sector productivity or food security training - Male	55
<b>Capacity Building (Horticulture CRSP Indicators)</b>	<b>Project Achievements</b>
Number of host country institutions, agencies and organizations in direct cooperation or collaboration	4
Number of workshops conducted for host country institution, agency, and organization personnel	3
Number of host country professionals attending workshops, training conferences, or similar - Female	10
Number of host country professionals attending workshops, training conferences, or similar - Male	5