



# Horticulture Innovation Lab

**2015 Annual Meeting Conference  
June 8-10 in Lusaka, Zambia**

## Welcome

On behalf of the management team of the Horticulture Innovation Lab, I would like to welcome you to our fifth annual meeting. We look forward to engaging with you to exchange information that promotes the use of horticulture to improve the livelihoods of smallholder farmers in Southern Africa and around the world.

This is our program's first meeting after receiving a positive evaluation and approval for five more years' worth of funding from the U.S. Agency for International Development. We believe this decision not only validates the work we have done through the Horticulture Innovation Lab thus far, but recognizes the pivotal role that fruits and vegetables play in people's lives—both in improving health and increasing rural incomes. We appreciate the important role that many of you have played in the success of the Horticulture Innovation Lab.

Over the past year, we have launched several new projects, with a focus on nutrition-sensitive horticulture, gender equity, postharvest losses, and scaling innovations. Additional projects will be developed in the coming years. As always, collaboration is key to programs like ours. Research collaborations between U.S. universities and institutions in developing countries increase opportunities for capacity building, while improving horticultural practices in the developing world. Thank you for joining us at this meeting. We look forward to continued collaboration with you.

– Elizabeth Mitcham, Director

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(June 8 for PIs)
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## Participating Projects

### In Latin America

#### **Gender equity: Honduras**

Janelle Larson of the Pennsylvania State University, leads a project focused on empowering women through horticulture called, “Women in Agriculture Network: Honduras.”

#### **Vegetable grafting: Honduras and Guatemala**

James Nienhuis of the University of Wisconsin-Madison, leads a spin-off project that will expand tomato grafting for entrepreneurs called, “Plántulas de Esperanza.”

#### **Regional Center at Zamorano: Honduras**

Julio Lopez of the Panamerican Agricultural School, Zamorano, directs this regional center, which is also called “El Centro Regional de Innovación para las Hortalizas y Frutas en Zamorano.”

### In Africa

#### **Nutrition: Zambia and Kenya**

James Simon of Rutgers, The State University of New Jersey, leads a nutrition-sensitive horticulture project called, “Improving Income and Nutrition of Smallholder Farmers in Eastern Africa using a Market Driven Approach to Enhance Value Chain Production of African Indigenous Vegetables.”

#### **Irrigation: Uganda**

Kate Scow of the University of California, Davis, leads a spin-off project focused on small-scale irrigation solutions, “Innovations in Dry Season Horticulture for Women and Smallholders in East Africa.”

### In Asia

#### **Conservation agriculture: Cambodia and Nepal**

Manny Reyes of North Carolina Agricultural and Technical State University, leads a spin-off project that promotes conservation agriculture and drip irrigation, “Incentives and Markets for Vegetable Smallholders to Practice Water and Labor Saving Technologies.”

#### **Potato storage: Bangladesh**

Michael Reid, Horticulture Innovation Lab, UC Davis, leads an associate award called, “Innovative potato storage for smallholder farmers in Bangladesh.”

#### **Regional Center at Kasetsart University: Thailand**

Poonpipope Kasemsap of Kasetsart University directs this regional center, with responsibilities in Bangladesh, Nepal and Cambodia.

**Please note:** Additional projects are currently in various stages of discussion, development and funding. These are the projects primarily represented at this meeting. This list was updated May 2015, and will be updated in the future.

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# Workday - Monday, June 8

8:00 a.m. Registration begins

9:00 a.m. **Welcome**  
Group introductions and overview of the day.

**Horticulture Innovation Lab directions:** Broad goals of the program's new phase  
*Beth Mitcham, Director, Horticulture Innovation Lab, UC Davis*

**Recent changes at USAID:** What's new and relevant?  
*John Bowman, AOR for the Horticulture Innovation Lab, Bureau for Food Security, USAID*

10:00 a.m. Group photo  
Followed by tea and coffee break

11:00 a.m. **Meet the projects, bus stop round #1**  
At each stop, a host presents what they are doing and receives questions. Travelers take note of "what I'd like to know" and "what I could offer" on worksheet, for each stop. Each session lasts 10 minutes.  
**Output:** Knowledge of projects and project members. Identify possible areas of interest and who might have information to help.

- Conservation agriculture in Cambodia and Nepal
- Vegetable grafting in Honduras and Guatemala
- Regional Center at Zamorano in Honduras
- Nutrition in Zambia and Kenya

12:00 p.m. Lunch

1:00 p.m. **Meet the projects, bus stop round #2**

- Irrigation in Uganda
- Gender equity in Honduras
- Regional Center at Kasetsart University in Thailand
- Potato storage in Bangladesh

2:00 p.m. **Gender workshop:** Simple tools and opportunities to incorporate gender issues into projects.  
*Janelle Larson and Leif Jensen, Penn State; Arie Sanders, Panamerican Agricultural School, Zamorano*

3:00 p.m. **IPM Innovation Lab presentation:** What can we offer each other?  
*Rangaswamy (Muni) Muniappan, Director, IPM Innovation Lab, Virginia Tech*

3:30 p.m. Coffee break

4:00 p.m. **Seeking synergies**  
Break into groups. Use lessons learned from the bus stop sessions and your worksheet notes to guide you. Identify potential synergies in terms of content, activities and approaches. Think about: training, materials, partners, sharing networks, joint visits, major issues and how to improve efficiencies.  
**Output:** Each group will share in plenary 1-2 specific areas of potential synergy.

4:45 p.m. Wrap-up and closing

7:00 p.m. Conference Dinner

**Tuesday**  
**7:00 a.m.**

**P.I.s** - Meet tomorrow morning for mandatory, PI-only breakfast meeting with Amanda Crump.





# Horticultural Innovation Lab in Southern Africa

With funds from the U.S. Agency for International Development, the Horticulture Innovation Lab has supported more than \$2 million in horticultural research projects that affect smallholder farmers in countries in Southern Africa. Projects in this region account for approximately 16 percent of the Horticulture Innovation Lab's total portfolio. Projects have included:

### Improving horticultural production:

- Establishing GIS data for horticultural production in Malawi

### Postharvest practices:

- Improving postharvest practices with local market support in Zambia

### Agricultural marketing and market access:

- Strengthening the value chain for African indigenous vegetables in Zambia
- Improving vegetable quality through a collaboration with local tourist hotels in Zambia
- Evaluating support for smallholder production of paprika and tomatoes in Zimbabwe

### Enabling environment and policy:

- Integrating Rooibos tea farmers with fair-trade markets in South Africa

### Nutrition:

- Improving nutrition with African indigenous vegetables in Zambia



In Malawi, agents from the Bvumbwe Agricultural Research Station worked with Mark Lundy, then a UC Davis graduate student, on a Horticulture Innovation Lab Trellis Fund project that introduced modern cultivars and practices to smallholder tomato growers.



Using a markets-first approach, vegetable farmers in Zambia expanded their businesses into nursery production that generated nearly \$170,000 in its first year and impacted 135 farmers.

## Partners in Southern Africa

- Agribusiness in Sustainable Natural African Plant Products, Ghana, South Africa and Zambia
- International Relief and Development, Zimbabwe
- Sandra Kruger and Associates, South Africa
- Stellenbosch University, South Africa
- University of the Western Cape, South Africa
- World Relief, Malawi

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# Conference - Tuesday, June 9

9:00 a.m. Registration

9:30 a.m. **Horticulture in Zambia**

Welcome and Introductions

Horticulture Innovation Lab Activities in Southern Africa:  
Why horticultural research is important for international development  
*Elizabeth Mitcham, Director, Horticulture Innovation Lab, UC Davis*

USAID programs in Zambia  
*Olive Kaluwa, USAID/Zambia*

Importance of Innovation for Agricultural Transformation:  
Implications for the horticultural sector in Zambia  
*Samuel Bwalya, United Nations Development Programme*

10:35 a.m. Break

11:00 a.m. **Workshop: A New Model for Extension**

"Farm Business Advisors:  
Comprehensive Extension Services to Enhance Productivity and Improve Resiliency"  
*Melanie Wilkinson and Kenneth Chelemu, International Development Enterprises (iDE)*

12:30 p.m. Lunch

1:30 p.m. **Panel: Future Opportunities in Horticulture**

Guest speakers will discuss innovative business models and opportunities for smallholders to grow their businesses in Zambia.

3:00 p.m. **Horticulture Expo: Innovation and entrepreneurship in Zambia**

*Reception with snacks. Room TBA*

Representatives have been invited to share information about their work, from individual booths.

- local food companies
- NGOs
- ag suppliers

4:30 p.m. End





## Tour - Wednesday, June 10

8:00 a.m.

### Tour departure

**Objective:** Participants will visit a variety of entrepreneurial enterprises in Zambia's horticultural sector, including a farm, a small-scale processor, and a network of start-up businesses.

Groups will depart from hotel on separate buses for tours. Each group will rotate through all three stops, but in a different order.

Boxed lunches will be provided.

- *Stop A: Agri-business incubator*

The **Agribusiness Incubation Trust (AgBIT)** is a public-private partnership that aims to accelerate innovation and support the growth of start-up businesses in agriculture. Many of their current start-up businesses are related to the horticulture sector, from seed production to fruit and vegetable processing.

- *Stop B: Small-scale processing and packaging operation*

**Sylva Foods** is a food-processing business that works with local farmers to procure and dry a variety of African indigenous vegetables, which the company packages and sells to supermarkets.

- *Stop C: Farm growing horticultural crops*

**Lilayi Cooperative** is a farming cooperative with approximately 50 members. The farm grows African indigenous vegetables, sweet potatoes, and cabbage using greenhouses and rainwater harvesting. This farm works with USAID's Commercial Agribusiness for Sustainable Horticulture (CASH) project.

4:00 p.m.

Estimated return to the hotel

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## Thank you for attending!

For presentations, photos, and other information from this meeting, visit: <http://horticulture.ucdavis.edu/2015>



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