



Horticulture Innovation Lab

2016 Annual Meeting

March 14-15 in Siem Reap, Cambodia

Welcome

On behalf of the management team of the Horticulture Innovation Lab, I would like to welcome you to our sixth 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 Southeast Asia and around the world.

Collaboration is key to programs like ours. Research collaborations between U.S. universities and institutions in developing countries increase opportunities for capacity building and knowledge exchange, while improving horticultural practices in the developing world.

Using climate-smart practices, improving food safety, reducing postharvest losses, and making strong market connections are some of the important themes for the Horticulture Innovation Lab's work in Cambodia. We are very interested to learn more about other successful horticultural projects in the region, to exchange ideas and information. How can growing fruits and vegetables help farmers out of poverty and improve community nutrition?

Thank you for joining us at this meeting! We appreciate the important role that many of you have played in the success of the Horticulture Innovation Lab and the collaborations thus far. We look forward to new collaborations and fresh ideas.

– Elizabeth Mitcham, Director

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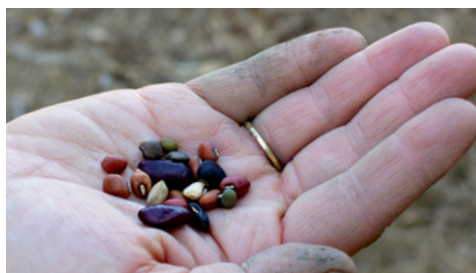
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Participating Projects

In Asia

Conservation agriculture: Cambodia and Nepal

Manny Reyes of North Carolina A&T State University, leads a project promoting conservation agriculture practices for vegetable growers.

Potato storage: Bangladesh

Amrita Mukherjee of the Horticulture Innovation Lab worked on a project for innovative potato storage for smallholder farmers.

Regional Center at Kasetsart University: Thailand

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

Seed drying: Bangladesh

Johan Van Asbrouck of Rhino Research leads a project scaling up drying technologies for horticultural seeds.

Nutrition: Bangladesh

Angelos Deltsidis of the University of California, Davis, works on a project examining the effects of horticultural interventions on nutrition.

Safe vegetables: Cambodia

Borarin Buntong of the Royal University of Agriculture was a partner on a project creating a market niche for safe vegetables.

In Central America

Gender equity: Honduras

Janelle Larson of the Pennsylvania State University leads a project empowering women through horticulture.

Vegetable grafting: Honduras and Guatemala

James Nienhuis of the University of Wisconsin-Madison leads a project expanding tomato grafting for entrepreneurship.

Regional Center at Zamorano: Honduras

Julio Lopez of the Panamerican Agricultural School, Zamorano, directs this regional center, with responsibilities in Honduras, Guatemala and Haiti.

In Africa

Nutrition: Zambia and Kenya

James Simon of Rutgers, The State University of New Jersey, leads a project improving nutrition with African indigenous vegetables.

Irrigation: Uganda

Kate Scow of the University of California, Davis, leads a project developing small-scale irrigation solutions.

Global

Trellis: U.S., Feed the Future countries

Elyssa Lewis of the University of California, Davis, is a graduate student manager of the Horticulture Innovation Lab's Trellis Fund program.

Please note: Additional projects are currently in various stages of discussion, development and funding. These are the Horticulture Innovation Lab projects primarily represented at this meeting.



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Regional Horticulture Conference

Monday, March 14, 8:30 a.m. Registration

9:00 a.m.	Welcome and introductions , <i>Elizabeth Mitcham, Director, Horticulture Innovation Lab</i> <i>Men Sarom, Royal University of Agriculture</i> <i>Sang Lee, USAID/Cambodia</i> <i>John Bowman, USAID</i>
9:45 a.m.	Horticulture Innovation Lab overview , <i>Elizabeth Mitcham</i>
10:00 a.m.	Group photo and tea break
10:30 a.m.	Lightning talks, Round 1 Each presenter will have 5 minutes and 20 slides to discuss highlights of interest. <ul style="list-style-type: none">• Tools for drying seeds, <i>Johan Van Asbrouck</i>• Cambodia HARVEST, <i>Symantha Holben, FINTRAC</i>• ECHO in Southeast Asia, <i>Boonsong Thansrithong, ECHO</i>• Horticulture Innovation Lab Regional Center at Zamorano in Honduras, <i>Julio Lopez</i>• Vegetable grafting in Honduras and Guatemala, <i>Jim Nienhuis</i>• Indigenous vegetables for nutrition in Zambia and Kenya, <i>Jim Simon</i>• Horticulture and nutrition in Bangladesh, <i>Angelos Deltsidis</i>
11:30 a.m.	Roundtable discussions Speakers will each host a table for questions and further discussion, based on their lightning talks. Each discussion session will last 15 minutes, so you may select up to 4 tables for follow-up discussions.
12:30 p.m.	Lunch
2:00 p.m.	Lightning talks, Round 2 <ul style="list-style-type: none">• Gender equity in Honduras, <i>Janelle Larson</i>• Conservation agriculture in Cambodia and Nepal, <i>Manny Reyes</i>• Irrigation innovations in Uganda, <i>Kate Scow</i>• Potato storage in Bangladesh, <i>Amrita Mukherjee</i>• AVRDC - The World Vegetable Center in Southeast Asia, <i>Fenton Beed, AVRDC</i>• Regional Center at Kasetsart University in Thailand, <i>Poonpipope Kasemsap</i>• Trellis: Supporting local organizations while engaging graduate students, <i>Elyssa Lewis</i>• Safe vegetable production in Cambodia, <i>Borarin Buntong</i>
3:00 p.m.	Roundtable discussions Select up to 4 tables for 15-minute discussion sessions.
4:00 p.m. – 5:00 p.m.	Horticulture Expo: Innovation and hands-on demonstrations Reception with snacks. Booths with information and demonstrations from local projects and programs.



Marketing bookmark for the vegetable group. Art by Acel Folledo-Sanguir.

Tour

Tuesday, March 15

7:45 a.m. Tour participants will depart from the hotel promptly at 8:00 a.m., so please gather in the lobby early. Groups will depart from hotel on separate buses for tours. Each group will rotate through all three stops, but in a different order.

Stop A: **Grown Right...**

Small groups will explore the conservation agriculture practices being used by farmers and partners to grow vegetables, on the Horticulture Innovation Lab project led by Manny Reyes, "Promoting conservation agriculture for vegetable growers." Highlights of these practices include: drip irrigation, no till, continuous mulch, species diversity, integrated pest management, and a seedling nursery.

Stop B: **Handled Right, Community Right**

Continuing the visit of the "Promoting conservation agriculture for vegetable growers" project, the group will see how farmers are preparing their vegetables for the market, including a CoolBot-equipped cool room, packing house, and "tuktukbot." The group will also meet with community leaders engaged in this project for discussion and Q&A. Topics for discussion include the set-up of their cooperative, income from cooperative marketing, commercial vegetable home gardeners, and the neighborhood buying vegetables.

Stop C: **HARVEST project site**

Focusing on agriculture as a business, as opposed to subsistence farming, is the focus of Cambodia HARVEST. The project works with households that have larger land holdings to introduce commercial farming technology. Participants will see several HARVEST clients and commercial horticulture (sweet melon, yardlong bean, sweet pepper) in Anchan village.

We will return to the hotel for lunch.

2:00 p.m. Depart hotel for Angkor Wat tour.

7:00 p.m. Return to the hotel.

Horticulture Innovation Lab Regional Center at Kasetsart University

Overview

The Horticulture Innovation Lab Regional Center at Kasetsart University serves Thailand, Bangladesh, Nepal and Cambodia by providing:

- Training for farmers and horticultural professionals
- Technical assistance and innovative technologies
- Curricula and material development
- Information dissemination

The center brings together key regional players with Kasetsart University in Thailand and other Horticulture Innovation Lab partners to improve livelihoods of smallholder farmers and small businesses in South and Southeast Asia.

Technologies at the center

The center includes adaptations and demonstrations of horticultural technologies. Some of the technologies demonstrated at this center include:

- Pest-exclusion nets
- Drying beads
- CoolBot for cold rooms
- Chimney solar dryer
- Solar pump for irrigation
- Zero-energy cool chamber (ZECC)



Jingtair Siriphanich, of Kasetsart University, discuss the CoolBot with visitors to the center during a USAID Global Learning and Evidence Exchange event about scaling up agricultural technology.

Highlights and activities

- In Cambodia, the center has led trainings in partnership with the Royal University of Agriculture.
- In Bangladesh, the center has led trainings with partners Helen Keller International and the Feed the Future Bangladesh Agricultural Value Chain Program.
- In Nepal, the center has led trainings with International Development Enterprise (iDE).
- Each year, the center supports the International Vegetable Training Course led by AVRDC-The World Vegetable Center.
- The center also supports a D-Lab course to teach development-focused problem-solving, design and dissemination to Kasetsart University students.
- The center has an active steering committee with members from throughout the region representing academic institutions, NGOs, researchers, AVRDC and USAID.
- The center officially opened in February 2012.

Who to contact



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Location

Kasetsart University
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<http://horticulture.ucdavis.edu>



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Horticulture Innovation Lab in Asia

With funds from the U.S. Agency for International Development, the Horticulture Innovation Lab has supported more than \$3.2 million in horticultural research projects that affect smallholder farmers in Asian countries. Topics have included:

Seed systems:

- Scaling up drying technologies for horticultural seed in Bangladesh
- Introducing seed storage technologies in Bangladesh, India, Nepal and Thailand
- Strengthening indigenous seed systems in Bangladesh, Cambodia, Laos, Thailand and Vietnam

Improving extension:

- Testing cell phone-based extension services in India, Nepal and Sri Lanka
- Exploring the power of savings groups in adopting improved technologies in Cambodia

Sustainable production of horticultural crops:

- Promoting conservation agriculture for vegetable growers in Cambodia and Nepal
- Creating a market niche for 'food-safe' vegetables in Cambodia and Vietnam



Nutrition

- Examining the effects of horticultural interventions on nutrition in Bangladesh

Postharvest practices:

- Developing a postharvest alternative to synthetic fungicide in Sri Lanka
- Demonstrating low-cost cooling technology in India
- Testing cool storage for potatoes in Bangladesh
- Increasing food safety through a consortium in Bangladesh and India
- Strengthening local postharvest expertise in Cambodia and Vietnam

Friday: On March 18, the Royal University of Agriculture and the Horticulture Innovation Lab will present a **Symposium on Horticultural Science** at the RUA campus in Phnom Penh. The focus of this event will be horticultural science and research, with lectures and a poster session, largely attended by RUA students and faculty.

Connect with us

Find presentations, photos, and other information from this meeting
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Throughout the year, please continue to exchange information with us:

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