



## Horticulture CRSP Regional Centers of Innovation Make Impact Worldwide

We build global partnerships for fruit and vegetable research to improve livelihoods in developing countries.

### Beth Mitcham Director

## Collaborative Research Support Programs (CRSP)

- Harness the expertise in research within the US Public Universities for agriculture development in the poorest regions of the world
- Collaborations between US Universities and Developing Country partners



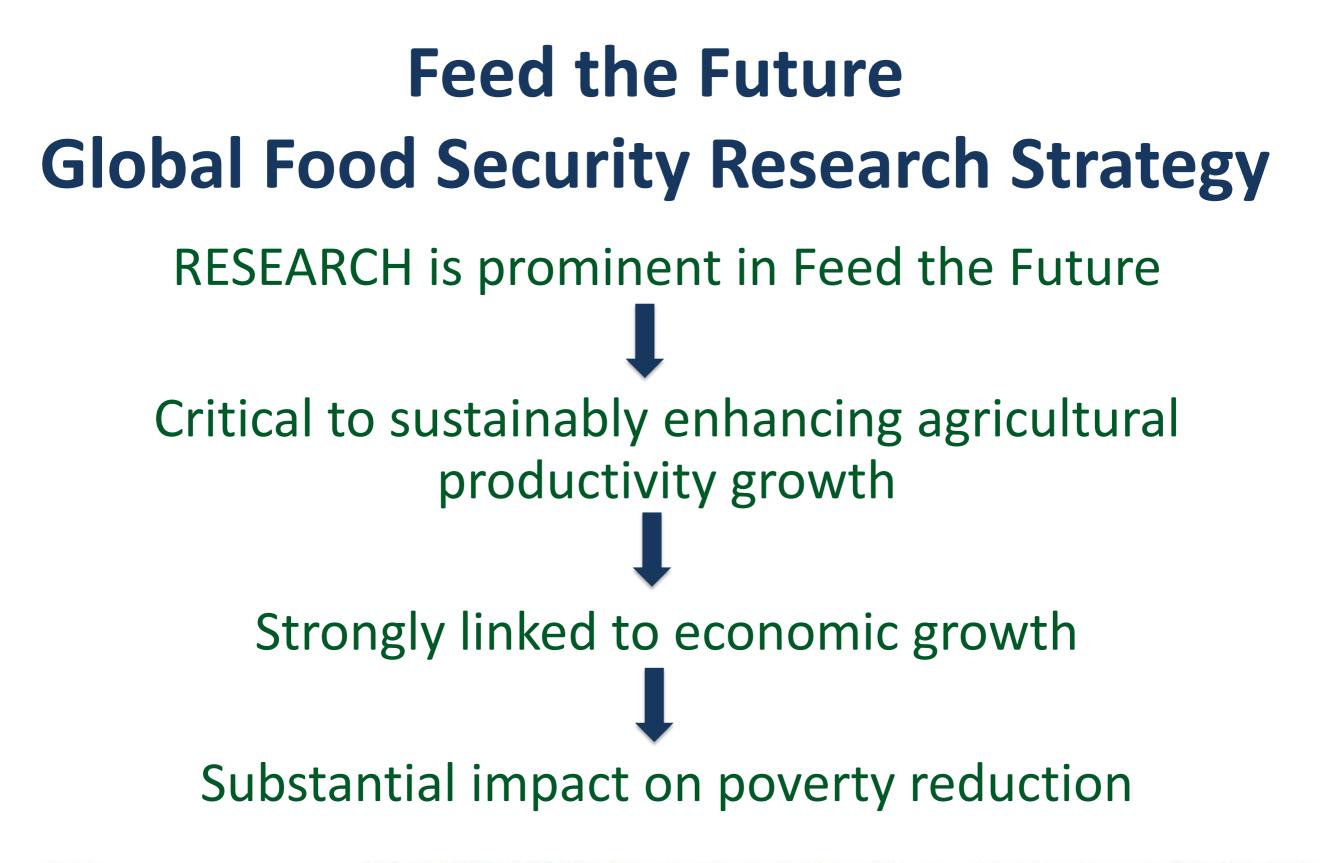
## US Agency for International Development (USAID)

- Collaborative Research Support Programs
  - Sorghum, Millet, and Other Grains University of Nebraska– Lincoln
  - Peanut University of Georgia
  - Livestock and Climate Change Colorado State University
  - Aquaculture Oregon State University
  - Integrated Pest Management Virginia Tech
  - Sustainable Agriculture Virginia Tech
  - Pulses Michigan State University
  - BASIS microfinance University of Wisconsin-Madison/UC Davis
  - Horticulture UC Davis (10/09)
  - Nutrition CRSP Tufts University

## **Feed the Future**

- Focus on agriculture and nutrition
  - Enhancing livelihoods of poor
  - Improving nutritional status of women and young children
- Focus on twenty countries where need is greatest and government also willing to invest
- Research is recognized as a critical need









## Worldwide Food Security

- Access to sufficient, safe, nutritious food
- Meets dietary needs for an active and healthy life



- Hidden Hunger Malnutrition
  - 2-3.5 billion lack Vitamins and minerals (28-50%)
  - Stunts the mental and physical capacity of individuals
  - Robs the poor of a healthy, productive life
- Essential to unlock potential for human development and economic growth over time



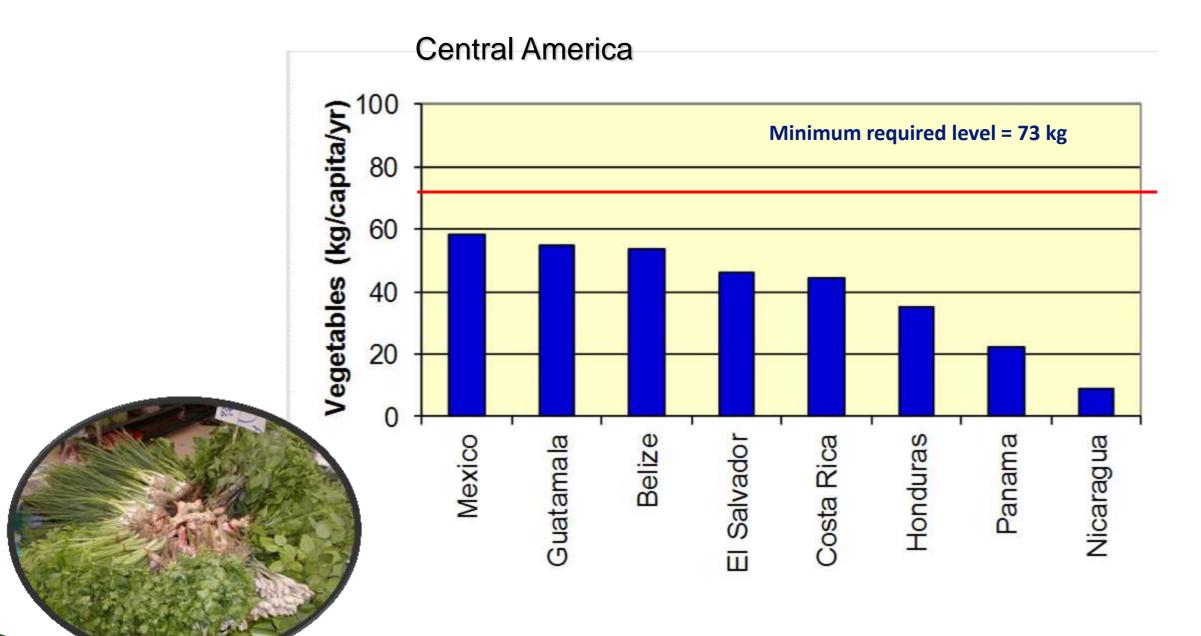


## Why Horticulture?

- High value crops income generation and diversification
- Intensive farming on small plots possible
- Nutritional benefits of diet diversification
- Women are heavily engaged in horticulture crop production and marketing



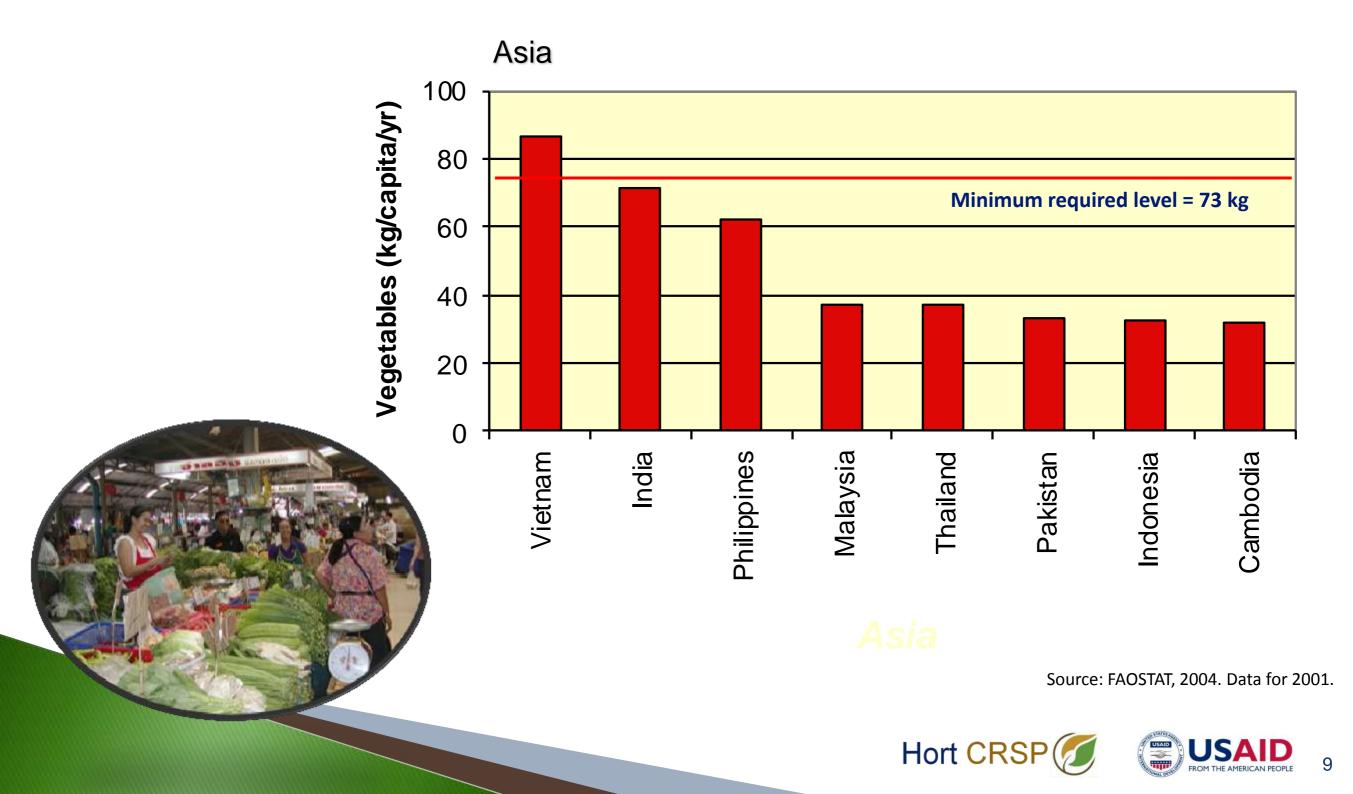
### Consumption of Horticultural Products Remains Very Low in Much of the Developing World



Source: FAOSTAT, 2004. Data for 2001.

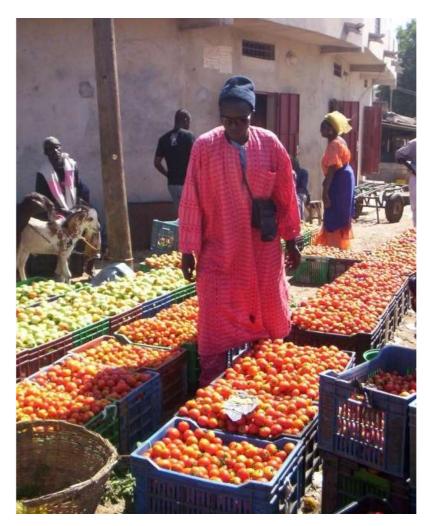


### Consumption of Horticultural Products Remains Very Low in Much of the Developing World



## **Objectives of Horticulture CRSP**

- To apply research findings and technical knowledge to increase smallholders' participation in markets
- To build local scientific and technical capacity
- To facilitate the development of policies that improve local horticultural trade







## Technologies Developed by Horticulture CRSP Scientists

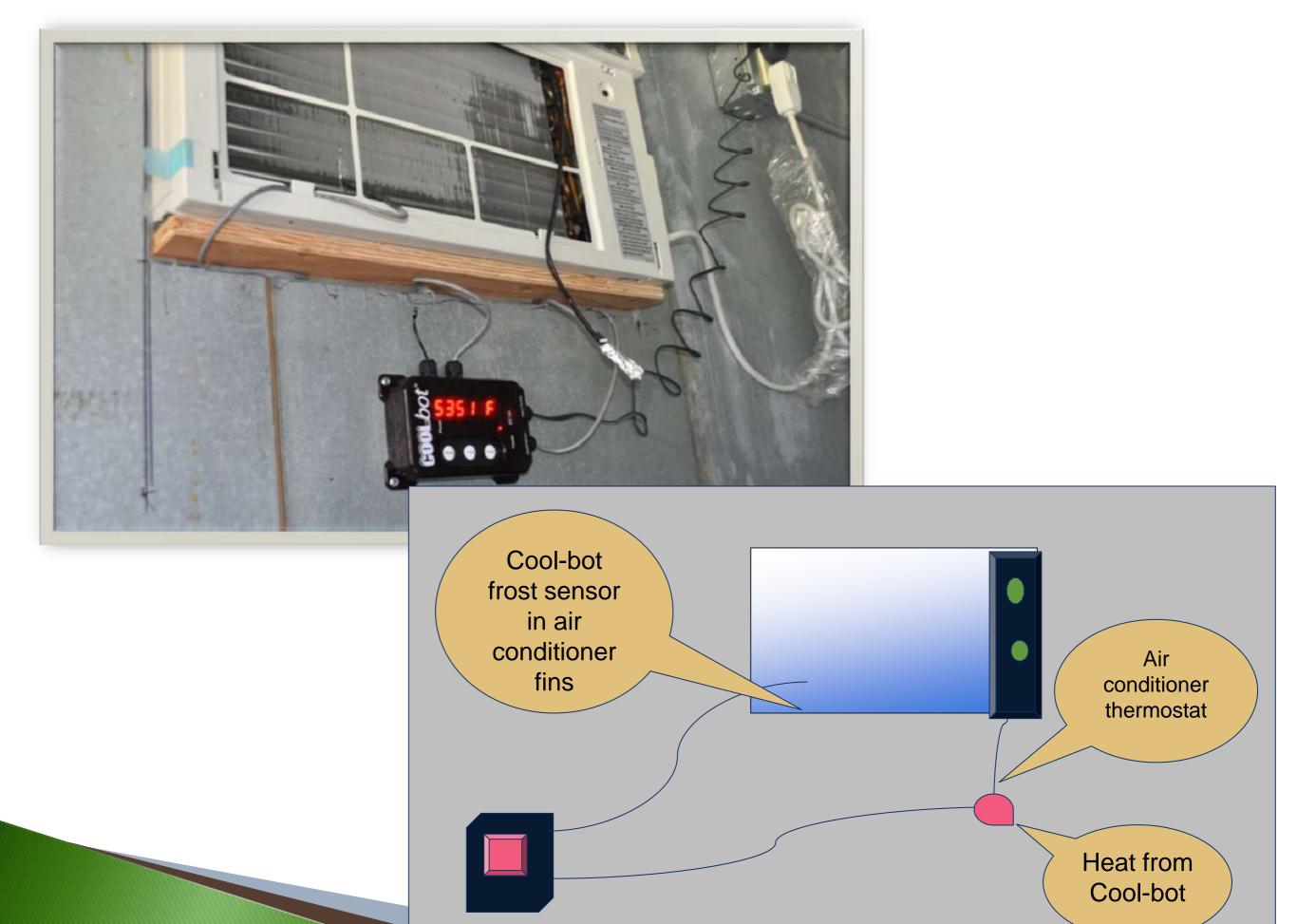
### **CoolBot Technology**

#### UC Davis Zamorano

 Coolrooms and Cool Transport for Small-Scale Farmers in India, Uganda and Honduras







## **Protected Agriculture**

 Bielinski Santos (U of Florida) and partners created PAINet to educate Central American farmers on novel production practices once only within reach of rich farmers.



#### Building an Ornamental Plant Industry in Honduras

#### UCDavis Zamorano





#### **Pest Exclusion Nets**

#### Michigan State KARI - Kenya CIRAD - France



#### New Technology for Postharvest Drying and Storage of Horticultural Seeds in India, Nepal and Thailand



## Phytopthora Diagnostics Training

 Jean Ristaino (NC State) and partners trained 24 plant diagnosticians from 9 Latin American countries who in turn served farmers working nearly 9,000 hectares



## Solar Dryer Comparison



UCDavis Ministry of Agric., Tanzania







## Horticulture CRSP Regional Innovation Centers

- Establish in regional institutions with recognized leadership in horticulture
- Will become regional foci for Horticulture CRSP activities
  - Training
  - Technology demonstration
  - Adaptive Research
  - Outreach
  - Information

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#### Locations:

- •Thailand Kasetsart University
- •Honduras Zamorano
- •Kenya KARI Thika





## **Regional Centers of Innovation**

- Showcase and adapt horticultural technologies
- Conduct regional trainings in collaboration with other institutions in the region
- Disseminate information about effective horticulture technologies
  - Using a variety of formats
- Steering committee comprised of members from various institutions and countries in the region
  - $\,\circ\,$  Set direction for activities supported at center
- Seek additional funding opportunities to augment Horticulture CRSP funding to meet objectives







## Horticulture CRSP Regional Center of Innovation at Kasetsart University

#### Established at Kasetsart University, Thailand February 8, 2012



The Hort CRSP - Kasetsart University Regional Center of Innovation Opening Ceremony February 8<sup>th</sup>, 2012 Kasetsart University, Bangkok, Thailand. Hort CRSP Regional Innovation Center at Kasetsart University, Thailand Grand Opening Ceremony & Workshop













## Horticulture CRSP Center of Innovation at Zamorano

- Horticulture CRSP is very pleased to initiate this collaboration with Zamorano
- We look forward to engaging others who work in horticulture throughout the region through this Center of Innovation
- Thank you to Zamorano for all their work to establish the center and prepare for the inauguration

#### Horticulture CRSP Regional Center of Innovation at KARI



#### Horticultural Practical Training Center – Thika, Kenya

#### Partnership between National Agricultural Research Center and Fresh Produce Exporters Association of Kenya (FPEAK)



#### The Center has 4 programs:

- Nursery
- Floriculture
- Vegetables
- Training
  - 1 day to 1 semester



















## Thank you!!

## For more information:

#### http://hortcrsp.ucdavis.edu

