

Strengthening Institutional Capacity to Catalyze Change

Panel Moderator: Rose Koenig, PI USAID AREA Project, Haiti--University of Florida

Panel Members: Betty Bugusu, Technical Director, LASER-PULSE- Purdue University; Julio Isabel Lopez Montes, Professor and Director of the Horticulture Innovation Lab Regional Center at Zamorano University ; Ramadhani O. Majubwa, Professor, Sokoine University of Agriculture

Overview of Session

- Universities can play an important role in developing, evaluating and disseminating new innovations in horticulture
- Examples of important innovations include improvement of seeds, evaluation and standardization of nutrient management practices, development of improved genetics, determination of the nutrient composition of foods, and development of food preservation and food safety technologies.
- Globally, there are different roles that universities play in agriculture research, education and extension
- Historically, investment in research based approaches to improve agriculture production have led to positive outcomes

Objectives of this panel

- Identify opportunities for universities to make positive contributions towards innovation within the horticultural sector
- Identify challenges that need to be addressed to improve the horticultural sector
- Identify innovative solutions that should be further tested or scaled up to improve the horticultural sector

Brief introductions by our panel members

- Betty Bugusu, Technical Director, LASER-PULSE- Purdue University

Long-term Assistance and Services for Research (LASER)

Partners for University-Led Solutions Engine (PULSE)



Betty Bugusu, PhD.

Technical Director, LASER PULSE





About LASER

- Is part of the portfolio of the Higher Education Solutions Network 2.0 from the Center for Development Research in the U.S. Global Development Lab (Lab) of USAID
- A 5-year (8/1/2018 to 7/31/2023) Cooperative Agreement with Purdue University as **Prime**, and **Consortium Members**:
 - Catholic Relief Services
 - Indiana University
 - Makerere University (Uganda)
 - University of Notre Dame
- Funding model: Core funding and Buy-ins from Missions, Bureaus, and Independent Offices
- Focus: USAID Geographic areas and Sectors
 - [Afghanistan and Pakistan](#)
 - [Africa](#)
 - [Asia](#)
 - [Europe and Eurasia](#)
 - [Latin America & the Caribbean](#)
 - [Middle East](#)
 - [Agriculture and Food Security](#)
 - [Democracy, Human Rights and Governance](#)
 - [Economic Growth and Trade](#)
 - [Education](#)
 - [Ending Extreme Poverty and Hunger](#)
 - [Environment and Global Climate Change](#)
 - [Gender Equality and Women's Empowerment](#)
 - [Global Health](#)
 - [Water and Sanitation](#)
 - [Working in Crises and Conflict](#)

LASER Objectives

Overall goal: To support the discovery and uptake of university-sourced, evidence-based solutions to development challenges

1. Increased institutional capacity of Low and Middle-income Countries (LMIC) HEI's to administer and support high quality, sustainable research programs
2. Increased capacity of HEIs to effectively identify and carry out research and translate research results to effectively address development challenges
 - Collaboration with government, non-government, and donor agencies
3. Increased capacity of government, non-government, and other implementing agencies to effectively identify research needs, interact with research organizations and apply research results



Brief introductions by our panel members

- Julio Isabel Lopez Montes, Professor and Director of the Horticulture Innovation Lab Regional Center



ZAMORANO UNIVERSITY

- AGRICULTURAL SCHOOL .
- PARTICIPATION OF STUDENTS FROM 20 LATIN AMERICAN COUNTRIES.
- FOCUS ON LEADERSHIP AND ENTREPRENEURSHIP
- 4 CARRERS AND ORIENTATIONS.
- BASED ON HONDURAS AND WITH STRONG LEADERSHIP IN CENTRAL AMERICA, CARIBBEAN AND SOUTH AMERICA.

REGIONAL INNOVATION CENTER FOR VEGETABLES AND FRUITS IN ZAMORANO

OBJECTIVES

- Promote agricultural production at low cost and in a sustainable way among small and medium size producers
- Test and generate productive and post-harvest technologies that adapt to environmental changes.
- Facilitate and promote the adaptation of new horticultural technologies.
- Promote food security, food safety and conservation agriculture.



Brief introductions by our panel members

- Ramadhani O. Majubwa (PhD)
Sokoine University of Agriculture (SUA), Morogoro, Tanzania
Department of Crop Sciences & Horticulture

Sokoine University of Agriculture (SUA)

Largest Public Agricultural University in TZ

Students: > 9375 (445 grad and 8,920 undergrad)

Programs: Agricultural & other related fields



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**HORTICULTURE
INNOVATION LAB**

UC DAVIS
UNIVERSITY OF CALIFORNIA

**KANSAS STATE
UNIVERSITY**



Feed the Future Innovation Lab for Collaborative Research on Horticulture

Roles of the University

- Teaching
- Research
- Outreach



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Feed the Future Innovation Lab for Collaborative Research on Horticulture

The Project; “Capacity Building on Produce Postharvest Management in Tanzania”

- Project focus areas

- ✓ Improve teaching infrastructure
- ✓ Training on postharvest management
- ✓ Technology sharing
- ✓ Curriculum development



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Feed the Future Innovation Lab for Collaborative Research on Horticulture

MSc. Horticulture Curriculum Development

In Tanzania, horticulture subsector grows very fast (10-12% /year)

The industry shift from traditional to high tech commercial production for high value domestic and export markets

However, the country lack local professionals with competence needed by the horticulture industry

Knowledge and skill development at MSc. level is the key



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Identify opportunities for universities to make positive contributions towards innovation within the horticultural sector

- Julio: Can you explain how higher education pedagogical approaches and curriculum reform can promote innovation within the horticultural sector?

Identify opportunities for universities to make positive contributions towards innovation within the horticultural sector

- Betty: Can you explain how LASER plans to assist faculty at universities in developing countries to conduct research in new/innovative ways for the horticultural sector?

Identify opportunities for universities to make positive contributions towards innovation within the horticultural sector

- Rama: Can you explain how you plan to utilize your new post harvest laboratory to transform post-harvest handling the horticultural sector?

Identify opportunities for universities to make positive contributions towards innovation within the horticultural sector

- Julio: How can innovations centers improve extension of technologies to farmers? Are they more effective than other extension transfer models?

Identify opportunities for universities to make positive contributions towards innovation within the horticultural sector

- Betty: Are there any innovative models that LASER utilizes to improve the linkage between research and extension to farmers?

Identify opportunities for universities to make positive contributions towards innovation within the horticultural sector

- Rama: How have you utilized the connections that you made during your USAID funded PhD program to build a successful research program in Tanzania?

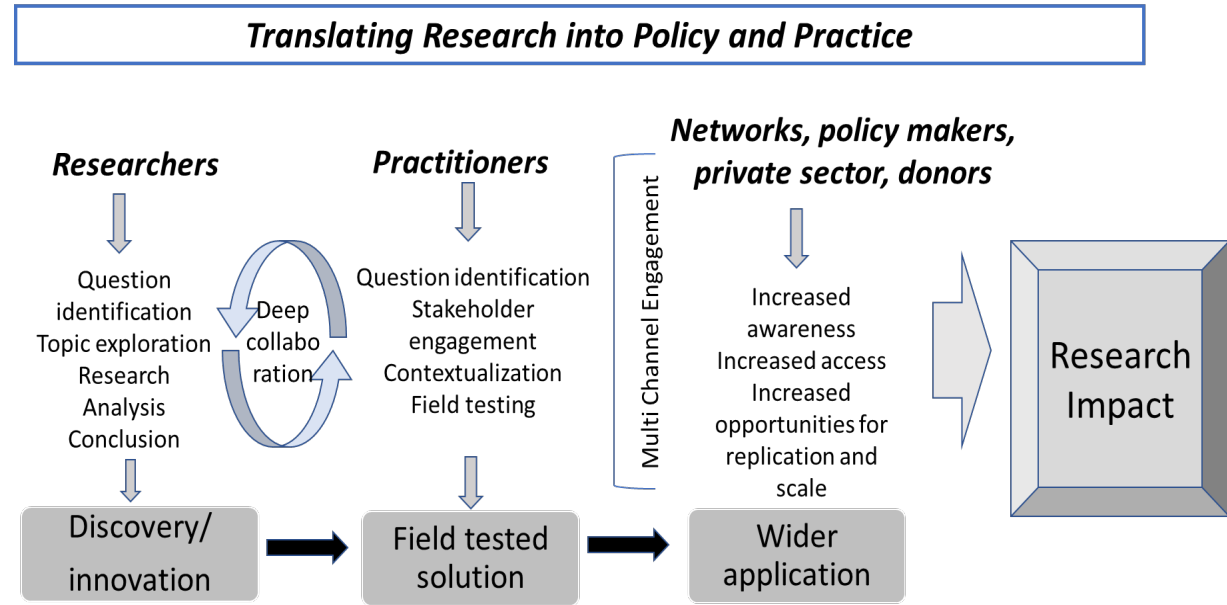
Identify
challenges that
need to be
addressed to
improve the
horticultural
sector

- Betty, Julio and Rama:
- Based on your experience, briefly describe the two greatest challenges/barriers that prevent higher education institutions from optimizing their impacts to the horticultural sector?

Identify innovative solutions that should be further tested or scaled up to improve the horticultural sector

- Rama: Describe a technology that you believe could improve or solve a major challenge of the horticultural sector in your country. How can your institution be part of the solution?

Identify innovative solutions that should be further tested or scaled up to improve the horticultural sector



- Betty: LASER-PULSE delivers practical, research-driven solutions to global development challenges. Can you briefly explain your strategy?

Identify
innovative
solutions that
should be further
tested or scaled
up to improve
the horticultural
sector

- Julio: Can you describe a technology that you believe could improve or solve a major challenge of the horticultural sector that should be introduced through the Regional Center at Zamorano? Would you change your approach to technology transfer?

Questions from the audience

- Thank you to our panel members!!!