Agricultural Engagement in Asia and Lessons for Successful Partnerships

Ronnie Coffman, Director of International Programs
College of Agriculture and Life Sciences (IP-CALS)
Cornell University
April 7, 2017 – Hong Kong
First Annual Banquet
The International Agricultural Society
Cornell University
May 19, 1922

Standing from left:
Mg. Tinio (Philippines), Secretary
I. C. Chandratytia (Siam)
Liberty Hyde Bailey
C. S. Liu (China), Chair Social Committee
Dean A. R. Mann
M. B. Needu (India), President
Dr. E. A. Bates
Prof. L. H. Parker (Massachusetts Agriculture College), Secretary, World Agriculture Society
Prof. Dwight Sanderson
From the Economist Online, 28 May 2012

Source: Cargill

*Cereals, rice, oilseeds, meals, oils and feed equivalent of meat
Trends in land and ocean temperatures
Temperature change, 1965–2014, °C

Source: Prepared by David Schoeman, University of the Sunshine Coast, from data provided by HadISST and CRUTS

Economist.com
Lessons for Sustainability & Success

• Forge global multidisciplinary collaborations
  o Other land grant institutions
  o CGIAR institutions
  o Local NARS

• Build human capacity

• Focus on the farmer

• Engage students abroad, in education and research, with faculty & peers from other agricultural institutions

• Create credibility with donors

• Leverage communication & advocacy networks & speak up for science
Durable Rust Resistance in Wheat (DRRW) and Delivering Genetic Gain in Wheat (DGGW)
Durable Rust Resistance in Wheat (DRRW) and Delivering Genetic Gain in Wheat (DGGW)

'Stem rust' fungus threatens global wheat harvest

New variety of an old crop disease called "stem rust" can infect crops in just a few hours and vast clouds of invisible spores can be carried by the wind for hundreds of miles.

The world's leading crop scientists issued a stark warning that a deadly и
Feed the Future South Asia Eggplant Improvement Project
Agricultural Innovation Partnership
Next Generation Cassava Breeding

- Improve flowering and seed set
- Implement Genomic Selection to shorten breeding cycle
- Integrate Latin American germplasm into African cassava breeding
- Increase communication and data exchange among partners
- Improve phenotyping efficiency
Tata-Cornell Initiative in Agriculture and Nutrition

TCI works to reduce poverty and malnutrition in rural India, while protecting environmental, economic and human health.
Genomic and Open-source Breeding Informatics Initiative
Where in the world is CALS
Opportunities for International Engagement for Students
USAID Feed the Future Innovation Lab for Collaborative Research on Horticulture

- Managed by a team at UC-Davis, funded by USAID
- 16 public US universities, including Cornell
- 114 international collaborators
  - 22 in Latin America & Caribbean
  - 31 in Asia and SE Asia
  - 61 in Africa
Exploring Collaboration between U.S. Land Grant Universities & the World Bank

• Myanmar Agricultural Development Support Project: $100M project (2015-22)

• India National Agricultural Higher Education Project: $146.4M project (2016-21)

• Afghanistan Agriculture Inputs Project (AAIP): $74.73 million project focusing on wheat seed improvement (2013-18)
The Alliance for Science Mission

The Alliance for Science seeks to promote access to scientific innovation as a means of enhancing food security, improving environmental sustainability and raising the quality of life globally.
2015 Fellows

Philippines (5)
Uganda (5)
Kenya (3)
Nigeria (3)
USA (3)
India (2)
Bangladesh (1)
Ghana (1)
Indonesia (1)
Tanzania (1)
“How can I expect people to praise and worship God if they are hungry and mired in poverty?” Rev. Fr. Noli Alparce, the Philippines
“Our family farm saw the benefits of biotechnology for small-scale farmers.”
-Joni Kamiya, Hawaii
Lessons for Sustainability & Success

• Forge global multidisciplinary collaborations
  o Other land grant institutions
  o CGIAR institutions
  o Local NARS
• Build human capacity
• Focus on the farmer
• Engage students abroad, in education and research, with faculty & peers from other agricultural institutions
• Create credibility with donors
• Leverage communication & advocacy networks & speak up for science
Work for a food secure world... Take it to the farmer... Build sustainability... Make a Difference Globally.

THANK YOU!