

# Feed the Future Public-Private Partnership Technical Forum February 22, 2012

# **FINAL REPORT**

## **Executive Summary**

On February 22nd, more than 100 representatives from the private sector and the U.S. Government (USG) participated in the first Feed the Future (FtF) Private-Public Partnership Technical Forum, held at the White House Conference Center. Modeled after similar consultations with the academic, research, and non-governmental communities, the Forum's objective was to identify specific activities for partnership between the USG and the private sector in support of the goals of FTF. The plenary session was chaired by FTF Deputy Coordinator for Diplomacy Mr. Jonathan Shrier, who gave an overview of the genesis and approach of Feed the Future. U.S. Agency for International Development (USAID) Administrator Dr. Rajiv Shah gave the keynote address, emphasizing the importance of global food security to the United States, and the critical role of private sector capabilities in achieving sustainable agricultural productivity increases. U.S. Department of Agriculture (USDA) Under Secretary for Research, Education and Economics Dr. Catherine Woteki addressed the global challenge for agricultural research, the objectives of the FTF Research Strategy, and the importance of public-private collaboration on research investments. White House Office of Science and Technology Policy Analyst Hillary Chen, and Global Harvest Initiative Executive Director Dr. William G. Lesher, also provided introductory remarks. The plenary session was followed by four simultaneous breakout sessions on genomics/crop and animal improvement, extension, seed technology, and agricultural finance and risk management, as well as a concurrent virtual session. The closing plenary session highlighted specific next steps from the breakout sessions. A webcast of the opening plenary and closing session and Forum papers are available through http://www.feedthefuture.gov. A list of participants by session is provided in the Appendix.

#### **Summary of Breakout Sessions**

#### **Virtual Session**

A concurrent virtual breakout session enabled 25 participants to listen to the plenary opening and closing sessions via webcast. Participants provided the feedback on all four breakout session issue areas. Virtual session participants who are interested in pursuing potential private-public partnerships can contact Dana Richey, USDA at <a href="mailto:Dana.Richey@fas.usda.gov">Dana.Richey@fas.usda.gov</a> or Kathryn Garcia, Bureau for Food Security, Markets, Partnerships, and Innovation, USAID at <a href="mailto:kgarcia@usaid.gov">kgarcia@usaid.gov</a>.

Issue Area	Discussion Highlights
Extension	<ul> <li>Resources are needed to improve/strengthen extension systems.</li> <li>Focus should be on building on existing mechanisms for transferring knowledge (both traditional and non-traditional)</li> <li>Public and private sector can design a mechanism to share and exchange knowledge and information on extension lessons and best practices, such as newsletters</li> </ul>
Genomics/Crop and Animal Improvement	<ul> <li>Best practices/experiences in genomic partnerships in other sectors, such as biomedical, could be leveraged for agriculture and food security.</li> <li>Partnerships can build on existing biofortification work.</li> <li>The group could tap into specific partnerships such as with CIMMYT, Kenya Agricultural Research Institute, and the Agricultural Research Council of South Africa.</li> </ul>
Seed Technology	<ul> <li>Potential public-private partnerships could build on private sector expertise in a number of areas, such as preparing data packages to submit for regulatory approval.</li> <li>A range of technologies, models, and partnership approaches are needed. The conversation should be extended beyond the development of biotechnology to enhance biodiversity (e.g., other types of production advances, grain storage, Integrated Pest Management, agroecological approaches).</li> </ul>

#### **Genomics/Crop and Animal Improvement**

The session was led by Dr. Ann Bartuska, Deputy Under Secretary for Research, Education, and Economics, USDA and Dr. Max Rothschild, Senior Advisor for International Agricultural Research, USAID. Discussion identified a number of clear benefits to public-private partnerships, such as expanding access to critical contacts, tapping into the U.S. Government's ability to act as conveners of foreign government and private sector stakeholders, and lowering the barriers for entry into new markets. Participants also identified limitations to progress, such as the lack of laboratories and other critical infrastructure, limited human technical capacity, limited computing access and capability to utilize cutting edge genomic tools, and policy environments which restrict the adoption of new technologies and pathways to commercialization.

- Areas to focus on include increased water efficiency, important food crops for Africa, and "orphan crops", e.g. sorghum and cassava. Work should be coordinated with the Africa Orphan Crops Consortium, which includes the Gates Foundation, Mars, World Wildlife Fund, and others.
- Work on livestock should focus on identified Feed the Future priority livestock value chains.
- The computational infrastructure to support open access genomic databases needs to be developed, possibly through a global consortium on genomic/genetic information sharing.

Potential Partnerships	What and Where	Potential Participants	Next Steps
Helping improve physical infrastructure:  a) Genomics b) Phenotypic data c) Computational	To be determined	a) Genomics Illumina, Affymetrix b) Phenotypic data Pfizer, CRI, USDA (Ann Bartuska) c) Computational Possibly Affymetrix, Illumina with Biosciences in East and Central Africa Hub	USAID (Max Rothschild) will reach out to interested companies
Human Capacity building, focused on senior scientists	Training and internships in companies, coordinated with the U.S. Government, would build institutional capability both in U.S. companies and in scientists in Feed the Future countries.	Illumina, Affymetrix, Neogen/Geneseek, PepsiCo Novus, Monsanto, and Arcadia Biosciences	USAID (Max Rothschild) will reach out to interested companies
Global Capacity Building Initiative	Establish a Research Center and Foundation able to accept private sector funding, based on the model of the Fogarty Center at the National Institutes of Health (NIH). The Center would coordinate international agriculture research. This concept could be advanced through the G8, G20, and the World Economic Forum.	Possibly PepsiCo, Illumina, Affymetrix	Interested companies should contact USDA (Anita Regmi and Franz Hochstrasser)

#### **Extension:**

The session was led by Dr. Julie Howard, Chief Scientist, Bureau of Food Security, USAID and Dr. Hiram Larew, Director, Center for International Programs, National Institute of Food and Agriculture, USDA. The group discussed how effective extension was missing in many countries, and recognized the need for significant capacity building in extension systems (both public and private). Over the last 20 years, extension around the world has shifted from being mainly public to a plurality of providers, and public extension has become more decentralized.

- All tools should be on the table to enhance extension, including electronic extension (e.g., eXtension, cell phones, internet, YouTube, radio, etc.) as well as the essential person-to-person communication (e.g., farmer schools, train the trainer programs, demonstration plots).
- The U.S. system is a valuable model and has many lessons to share, but is not a perfect model. The strength of the U.S. system includes connections between research and extension institutions as well as its decentralization.
- Extension systems need to be designed in the context of the entire value chain.

Potential Partnerships	What and Where	Potential Participants	Next Steps
Demonstration Plots	Land O'Lakes' Winfield Answer Plot® model, where farmers visit an unbiased agronomist first then visit with various companies. They have three Plots in Kenya.	Land O'Lakes	Interested partners should reach out to Land O' Lakes
Learning/Sharing Platform	All expressed interest in learning more about extension best practices and lessons. Other areas of interest included:  • Best practices for market/needs segmentation;  • Business models for extension; and  • Determining what types of information require in-person vs. eXtension vs. phone approaches.	All participants	USAID (Julie Howard) will set up a webinar on mFarmer, Modernizing Extension and Advisory Systems (MEAS), eXtension, and foster an ongoing learning dialogue.
Develop prototypes for successful extension approaches, based on best practices. This could also include training/capacity building.	Potential geographic focus area examples from the discussion:  o Land O'Lakes: Kenya  o Global Cold Chain International: Kenya, Latin America (Guatemala), Mozambique  o mFarmer: East Africa  o Fintrac: Cambodia and Nepal	USAID (Julie Howard), USDA, CH2MHill, Monsanto*, Land O'Lakes*	<ul> <li>Identify locations with multiple interested partners</li> <li>Engage non-governmental organizations also working in the geographic area</li> <li>Collaborate on implementation of extension programs</li> </ul>
Capacity Building for Extension Specialists	Using Perfect Blend Biotic Fertilizers's model of partnering with Ministries of Agriculture to create Development and Research Centers, where both public and private entities could assist in human capacity development of extension workers.	USAID (Julie Howard), CH2MHill, Monsanto*, Land O'Lakes, USDA	Private sector partners interested in setting up training programs in collaboration with local institutions or providing other kinds of training, please contact USAID (Julie Howard)
Joint Public-Private Support for Extension	Public and private sector partners should urge developing country governments to build up extension offices and/or support private extension through certification, access to unbiased information, etc.	USAID (Julie Howard), USDA CH2MHill, Monsanto*, Land O'Lakes	Jointly craft a statement about the role of extension and the importance of government commitment and support.

#### **Seed Technology**

The session was led by Mr. William Craft, Deputy Assistant Secretary, Bureau of Economic and Business Affairs, Department of State and Dr. Michael Schechtman, Biotechnology Coordinator, USDA.

- **Key challenges include:** regional approaches are needed for regulatory reform, as a patchwork of regulation regimes impedes adoption; limited regulatory capacity; inadequate information for farmers; limited agronomic training; counterfeit agricultural products (chemicals/seeds/limited certification processes); addressing fears and perceptions; and limited capacity for risk assessment and management.
- Approaches to overcome those challenges include working with regulatory authorities to speed up approval processes; regional approaches; partnerships with existing programs like the Water Efficient Maize in Africa Project; and utilization of programs within the State Department.
- **Keys to success will be** forging local partnerships, such as with the Kenyan Seed Center, fostering buy-in from stakeholders, improving the policy enabling environment, and increasing local capacity.

Potential Partnerships	What and Where	Potential Participants	Next Steps
Communication Strategies	Outreach to <u>farmers</u> , the general public, and key stakeholders	State (Jack Bobo), Monsanto, Pioneer	State ( <u>Jack Bobo</u> ) will reach out to interested companies
Seed/Seed Systems/Seed Policy (especially regional approaches to regulatory reform)	Work on outreach from the beginning to the end of the lifecycle for seed systems. The USG could support training and internships in companies; policy level outreach; and bringing together regional regulators. Key partnerships are with the ISU Seed Science Center, COMESA, IFPRI and should include trilateral country partnerships, and farmer to farmer partnerships.	Monsanto, Pioneer, Syngenta, CropLife International, USDA (Ed Porter), USAID (John McMurdy and Deanna Gordon), and State (Jack Bobo)	USDA ( <u>Ed Porter</u> ) will reach out to interested companies
Field Management Approach	Kenya. In the absence of a good extension system, develop field-based training programs, such Land O'Lakes' Winfield Answer Plot® model.	Monsanto, Pioneer, Land O'Lakes, Syngenta, CropLife, USAID (John McMurdy), USDA (Ed Porter)	<ul> <li>Connect with the         Alliance for a Green         Revolution in Africa         (AGRA).</li> <li>USAID will follow up on         approaches in Kenya.</li> <li>Interested private         sector organizations         should contact USAID         (John McMurdy)</li> </ul>
Resource Exchange Group	Provide and exchange information on what the USG and the private sector are doing in seed technology in East Africa to ensure synergies and address gaps.	All participants	USTDA (Peggy Philbin) will convene the group
Biotechnology Product Stewardship Mentorship Smaller research and development and biotechnology activities by universities, NGO's, and international research centers are in need of expertise.	Possibly establish a group of private sector experts to provide either ad hoc or sustained mentorship / technical support to product development activities, particularly in stewardship, process management, trait development, field trial conduct, and regulatory preparation.	Monsanto, Pioneer, Syngenta, CropLife, USDA, USAID	USAID (John McMurdy) will draft a synopsis of this idea and reach out to interested companies.

#### **Agricultural Finance and Risk Management**

This session was led by Margaret Enis, Director, Office of Markets, Partnerships and Innovation, USAID, Jeffrey Levine, Private Enterprise Officer, Bureau for Food Security, USAID, and Dana Richey, Office of Capacity Building and Development, Foreign Agricultural Service, USDA. The group identified key countries of interest as Ghana (tier 1), Southern Agricultural Growth Corridor of Tanzania (SAGCOT) (tier 1), and Zambia (tier 2).

- Discussion centered on value chain financing (to support activities such as poultry feed), warehouse receipts (to assist with strengthening producer capacity and market relationships), and equipment finance (to mitigate risk and enable investments).
- It was also recognized that there were several "pre-conditions" that represented challenges for improving access to financial services: smallholder organizational capacity; linking smallholder organizations with markets; and risk mitigation measures for smallholder farmers.
- Keys to success will be strengthening relationships between smallholder organizations and markets, risk
  mitigation measures for smallholders, and supporting public-private partnerships organized around value
  chains.

Potential	What and Where	Potential Participants	Next Steps
Partnerships			
Poultry Feed Supply Chain	Ghana. Bring into existence a viable poultry feed supply chain, including increasing the production of soya for regional markets.	Seaboard, ADM, USAID, USDA, SwissRe	Work with the USAID Ghana Mission to develop an investment blueprint for a viable poultry feed supply chain. Lead: <u>Jeffrey Levine</u> , USAID, and <u>Dana Richey</u> , USDA.
Equipment Financing	SAGCOT (Tanzania) and South Africa Region (Zambia, Mozambique). Create partnerships in support of flexible financing platforms.	John Deere, AGCO, USAID, USDA, OPIC	Assessment of the equipment needs in SAGCOT. Evaluate the existing financing platforms for financing equipment for weaknesses and needs. Lead: Jeffrey Levine, USAID, and Dana Richey, USDA.
Warehouse Receipts and Storage/Cold- Storage These two areas were combined because of their complementary nature.	SAGCOT. Create partnerships in support of flexible financing platforms for warehouse receipts and storage/cold storage facilities. Focus on SAGCOT countries to leverage existing opportunities and resources.	USAID, USDA, Bunge*, SEAF*, Global Cold Chain Alliance*	Identify specific geographic opportunities for warehouse receipts and storage facilities. Assess needs and address gaps impeding transactions. Lead: Jeffrey Levine, USAID, and SEAF*.

<sup>\*</sup>Indicates to-be-confirmed potential partner

# Appendix Participants by Session

Seed Technology Session	Genomic/Crop and Animal Improvement Session
Bill Craft, State	Ann Bartuska, USDA
Michael Schechtman, USDA	Max Rothschild, USAID
Jack Bobo, State	Anita Regmi, USDA
Erica Seitzer, Global Harvest Initiative	Bill Christianson, Genus PLC
Lisa Zannoni, Syngenta	Scott Fleetwood, Novus International
Mark Roberts, Hormel Foods	Molly Fogarty, Nestle
Elizabeth Vancil, Monsanto	Keith Jones, Affymetrix
Steve Miller, Land O'Lakes	Donald Nkrumah, Pfizer
Howard Minigh, CropLife	Steve Brandwein, Arcadia Biosciences
Rebecca Bratter, U.S. Grains Council	Derek Yach, Pepsi Co
Peggy Philbin, USTDA	Denise Dewar, CropLife
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Ed Kaska, State	Shantu Kaushikkar, Affymetrix
Nwadiuto Esiobu, State	Edward Kaleikau, USDA
Daniel Jacobi, Pioneer Hibred International	Michael Forbes, Hormel Foods
Ed Porter, USDA	Charles Sukup, Sukup
Andrea Lupo, USTDA	Rob Cohen, Illumina
Jonathan Shrier, State	Franz Hochstrasser, USDA
John McMurdy, USAID	Kaitlin Campbell, Agriculture Processing Inc.
Sarah Gallo, National Corn Growers Association	Kate Hall, BIO
Angela Olsen, DuPont Pioneer	Jim Herbert, Neogen Corporation
	Mary Waters, North American Millers Association
	Robert Earl, The Coca-Cola Company
	Melissa Agustin, Monsanto
Extension Session	Agricultural Finance and Risk Management
Julie Howard, USAID	Margaret Enis, USAID
Hiram Larew, USDA	Jeff Levine, USAID
Lorena Alfaro, American Soybean Association	Dana Richey, USDA
Richard Tracy Global Cold Chain Alliance	Mildred Callear, Small Enterprise Assistance Funds
Mary Ann Rozum, USDA	Katherine Emerson, Monsanto
Lori Brock, Nathan Associates	William Lesher, Global Harvest Initiative
Mathew Dettman, ICFI International	Vanessa Stiffler-Claus, John Deere
Bob Rabatsky, Fintrac Inc.	Bruce Cameron, OPIC
Carla Geday, BMMI	Jim Sosnicky, Small Enterprise Assistance Funds
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Howard W. Buffett, Buffett farms/HGBF	Nikki Duncan, Global Cold Chain Alliance
Howard W. Buffett, Buffett farms/HGBF Laura Barringer, Global Harvest Initiative	
	Nikki Duncan, Global Cold Chain Alliance
Laura Barringer, Global Harvest Initiative	Nikki Duncan, Global Cold Chain Alliance Beth Holzman, ADM
Laura Barringer, Global Harvest Initiative Elvis Cordova, USDA	Nikki Duncan, Global Cold Chain Alliance Beth Holzman, ADM Lena Heron, USAID
Laura Barringer, Global Harvest Initiative Elvis Cordova, USDA Stephanie Grunenfelder, American Peanut Council	Nikki Duncan, Global Cold Chain Alliance Beth Holzman, ADM Lena Heron, USAID Anicca Jansen, USAID
Laura Barringer, Global Harvest Initiative Elvis Cordova, USDA Stephanie Grunenfelder, American Peanut Council Bradley Buck, Land O'Lakes	Nikki Duncan, Global Cold Chain Alliance Beth Holzman, ADM Lena Heron, USAID Anicca Jansen, USAID Philip de Leon, ARGO Corporation
Laura Barringer, Global Harvest Initiative Elvis Cordova, USDA Stephanie Grunenfelder, American Peanut Council Bradley Buck, Land O'Lakes Salah Abdelhamid, CH2M Hill	Nikki Duncan, Global Cold Chain Alliance Beth Holzman, ADM Lena Heron, USAID Anicca Jansen, USAID Philip de Leon, ARGO Corporation Steward Lindsey, Bunge
Laura Barringer, Global Harvest Initiative Elvis Cordova, USDA Stephanie Grunenfelder, American Peanut Council Bradley Buck, Land O'Lakes Salah Abdelhamid, CH2M Hill Steven Eaten, Pfizer Animal Health	Nikki Duncan, Global Cold Chain Alliance Beth Holzman, ADM Lena Heron, USAID Anicca Jansen, USAID Philip de Leon, ARGO Corporation Steward Lindsey, Bunge Carl Hausmann, Bunge
Laura Barringer, Global Harvest Initiative Elvis Cordova, USDA Stephanie Grunenfelder, American Peanut Council Bradley Buck, Land O'Lakes Salah Abdelhamid, CH2M Hill Steven Eaten, Pfizer Animal Health William Nelson, CHS Inc	Nikki Duncan, Global Cold Chain Alliance Beth Holzman, ADM Lena Heron, USAID Anicca Jansen, USAID Philip de Leon, ARGO Corporation Steward Lindsey, Bunge Carl Hausmann, Bunge Bridget Carle, Swiss Re
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Laura Barringer, Global Harvest Initiative Elvis Cordova, USDA Stephanie Grunenfelder, American Peanut Council Bradley Buck, Land O'Lakes Salah Abdelhamid, CH2M Hill Steven Eaten, Pfizer Animal Health William Nelson, CHS Inc Gary Alex, USAID Natalie DiNicola, Monsanto John Marler, Perfect Blend Biotic Fertilizers Tyler Jameson, U.S. Wheat Associates	Nikki Duncan, Global Cold Chain Alliance Beth Holzman, ADM Lena Heron, USAID Anicca Jansen, USAID Philip de Leon, ARGO Corporation Steward Lindsey, Bunge Carl Hausmann, Bunge Bridget Carle, Swiss Re Pat Donahue, GAO Robert Dismukes, USDA Ralph Moss, Seaboard Corporation Michele McNabb, Partnership to Cut Poverty and
Laura Barringer, Global Harvest Initiative Elvis Cordova, USDA Stephanie Grunenfelder, American Peanut Council Bradley Buck, Land O'Lakes Salah Abdelhamid, CH2M Hill Steven Eaten, Pfizer Animal Health William Nelson, CHS Inc Gary Alex, USAID Natalie DiNicola, Monsanto John Marler, Perfect Blend Biotic Fertilizers Tyler Jameson, U.S. Wheat Associates	Nikki Duncan, Global Cold Chain Alliance Beth Holzman, ADM Lena Heron, USAID Anicca Jansen, USAID Philip de Leon, ARGO Corporation Steward Lindsey, Bunge Carl Hausmann, Bunge Bridget Carle, Swiss Re Pat Donahue, GAO Robert Dismukes, USDA Ralph Moss, Seaboard Corporation Michele McNabb, Partnership to Cut Poverty and Hunger in Africa Maureen Harrington, Standard Bank of South Africa
Laura Barringer, Global Harvest Initiative Elvis Cordova, USDA Stephanie Grunenfelder, American Peanut Council Bradley Buck, Land O'Lakes Salah Abdelhamid, CH2M Hill Steven Eaten, Pfizer Animal Health William Nelson, CHS Inc Gary Alex, USAID Natalie DiNicola, Monsanto John Marler, Perfect Blend Biotic Fertilizers Tyler Jameson, U.S. Wheat Associates	Nikki Duncan, Global Cold Chain Alliance Beth Holzman, ADM Lena Heron, USAID Anicca Jansen, USAID Philip de Leon, ARGO Corporation Steward Lindsey, Bunge Carl Hausmann, Bunge Bridget Carle, Swiss Re Pat Donahue, GAO Robert Dismukes, USDA Ralph Moss, Seaboard Corporation Michele McNabb, Partnership to Cut Poverty and Hunger in Africa