

Session Purpose: A critical impediment to introducing new technologies (seed varieties, equipment, infrastructure, management practices, inputs) is the lack of extension services to support farmers and producers. This session will focus on extension in the digital information age to develop "win-win" partnership models for researchers, farmers, governments, and the private sector.

Session Deliverable: Identify potential public-private partnership opportunities that expand traditional systems and/or employ the use of electronic information services, knowledge platforms, text messages, and/or an electronic information "highway" system to close the information and knowledge gap for the evaluation and use of new technologies.

Context/Rationale:

A critical impediment to improving producer livelihoods and meeting smallholder farmers' needs is the lack of successfully functioning extension systems. These extension services are vital for both the private and public sector. They allow the benefits of adopting new technology to be demonstrated while at the same time provide guidance that allows farmers and producers to solve their own problems (whether it is a pest, disease, low productivity, lack of market access, etc.). Lack of access to other services, such as financing and insurance as well as information such as market pricing and climate forecasts, are additional challenges for smallholder farmers, and often limit broader private sector investment.

Roles for Public/Private Sectors: Private and public sectors have a history of working together in support of farmer education, using a variety of models. The World Cocoa Foundation, for example, works to build partnerships with cocoa farmers, origin governments, and agricultural development and environmental organizations, while working with international donors to support effective programs. The private sector at times provides information directly to farmers. For example, Monsanto created a national call center in India to support its farmer customers, and John Deere created visual extension tools for farmers in Zambia. However, such intensive private-sector extension efforts are often not cost-effective at scale, or require infrastructure and capacity that is lacking in parts of Africa. Meanwhile, USDA has much experience working with consortiums of universities and foreign ministries to strengthen and build capacity in public extension systems in places like Poland, Armenia, Serbia, Iraq, and now Afghanistan. USAID also has relationships with U.S. universities to teach and learn best practices in extension capacity building, assess country systems for their needs, and assist them in meeting those needs. USDA also has training programs (Cochran and Borlaug Fellowship and Faculty Exchange programs) that can be utilized to train developing country extension leaders and agents at U.S. universities.

Country Engagement: A key contextual point is that any public-private partnership developed to focus on extension services would need to address the self-described priorities of the host country. Participation would need to be at multiple levels including national government, field offices, and perhaps universities. Indeed, there is a role for the public sector, and a portion of the program would need to be supported by country resources and personnel. Even if supported initially by external funding, it is critical that any extension plan include an exit strategy to ensure financial sustainability in the long run.

Potential Partnership Focus Area:

Collaboration in extension services: Utilizes private-sector expertise and resources in marketing and technology and public-sector credibility in the provision of science-based, objective information.

Example projects:

- <u>Improve National Extension Service</u>: Knowledge and capacity of national extension systems could be improved though utilization of a Retiree Extension Service (i.e., the U.S. government works with the host country government and private sector to connect and fund extension services from willing retirees with agricultural expertise).
- <u>Increase farmers' access to quality seed by training local seed companies in quality seed</u> <u>management</u>: The U.S. government could convene seed companies and U.S. seed companies could serve as a resource for in-country seed companies. Conversations could occur between the private sector and the African Seed Trade Association. This would increase the flow of improved seed to farmers and open potential new markets/partners for U.S. companies.
- <u>*Co-Financing:*</u> Since the extension system will be beneficial for both public and private interests, a large number of private sector companies interested in reaching out to smallholders in a certain country could pool funds and use these to match public investments in agricultural extension agents. The extension agents would provide unbiased science-based information to assist the farmers and the private-sector companies could advertise. Funds could be used to pay for training, salaries, travel costs, a mini-grants program, or demonstration plots/buildings.
- <u>Asset Mapping</u>: Public and private sector partners could map their projects on a joint platform in order to see where they might be able to collaborate further.

Electronic extension service: Establish an open access knowledge platform and an electronic information "highway" system that enables farmers and extension agents to access information services and collect and maintain agricultural information. The highway could be used by both the public sector and by private-sector companies, such as input suppliers, banks, insurers, and others. A public-sector field extension network would provide services, including interpretation of the information for local conditions, advice on crops and livestock not serviced by the private sector, and services to small-holder and poorer producers who cannot pay for private services and/or may not be able to access the knowledge platform.

Example projects:

- <u>Public Knowledge Platform</u>: A national knowledge platform would collect and maintain various types of technical information, including alerts of pest outbreaks (detected through public- and private-sector extension services) and information on how to deal with those outbreaks. The knowledge platform would also include detailed agricultural information -- such as that found on eXtension and through U.S. universities, National Agricultural Research Organizations, and CGIAR, but adapted for local needs. A plan would need to be developed to ensure that information is useful to local producers. The platform could then serve as a resource for private technical advisors, extension field agents, university researchers, and ministry officials.
- <u>Electronic Information System to Support Field Network</u>: This public-private system would include tools and support to reach farmers via mobile technology. This could include cell phone access (including, if appropriate, smart phones), a network of centers to service cell phones and support Internet transactions, and a central information knowledge platform (mentioned above).

Private and public institutions could utilize the electronic information system to provide information, financing, and insurance services to farmer customers. Farmers could receive and request information through a combination of private- and public-sector sources, using text messages or phone conversations, complemented with a network of extension field agents, where needed.

Companies could choose to invest in call centers and use the private-public electronic system to provide services to their customers. These two-way services could include pushing information out to farmers such as recommendations and reminders, weather and market information, and receiving questions and calls from farmers seeking to understand how to properly use products or diagnose agronomic challenges.

- Joint Trust Fund to Provide Public Sector Extension Services: A national network of local and regional extension agents with cell phones could be funded through contributions to a joint trust funded by government, donors, and private-sector companies.
- Common trust fund approach: Private-sector companies could also contribute to a common trust fund, which would maintain a separation from individual companies, to pay fees for on-the-ground public-sector field agronomists to service more complicated agronomic issues impacting their farmer customers. National extension agents could cycle through the call center as a way of refreshing their own training, before heading out to a village.

Key Questions for Discussion What models exist for joint government, donor, and private-sector-funded extension? What is the role of each sector in public-private sector extension services? How will the sales/promotion piece of the private sector's sales force be clearly separate from unbiased public-sector extension agents and information sources? How might the use of electronic financing and insurance services fit in and who would be providing these services?

APPENDIX

<u>Illustrative Current Investments:</u>

Purpose/Brief description	Organization (and partners when applicable)	Point of Contact
Modernizing Extension Program	USAID	Margaret Enis
International extension capacity-building projects	USDA: NIFA & FAS	Mike McGirr
eXtension	USDA/Land Grant	Greg Crosby
	Universities-Cooperative	
	Extension Service	
Visual extension tools in Zambia	John Deere	Vanessa Stiffler-
		Claus
Feed the Future Data/market information/statistics capacity-	USAID/USDA	Cheryl
building program		Christensen/Larry
		Silvers
mFarmer , a public-private partnership between USAID,	USAID	Judith Payne
Gates Foundation and GSMA focused on mobile extension		
services. (see <u>www.gsmworld.com/mfarmer</u>) Includes a		
challenge fund for grants to partnerships between agricultural		
development projects and cell phone service providers to		
rapidly scale m-extension services in Africa.		
FACET , focuses on ICT and agriculture – knowledge	USAID	Judith Payne
management, briefing papers, webinars, profiles of promising		
applications. (see <u>http://microlinks.kdid.org/learning-</u>		
marketplace/news/facet-project-offers-briefing-papers-		
<u>agriculture-and-ict</u>)	155	
"farm business advisors" and "lead farmer" programs in	1DE	Stephanie Cox
many countries that get information out about low-cost,		
small-scale, big-impact agricultural technologies.	CADI	Detaile Needer
Plantwise has plant doctors in 19 countries, funded	CABI	Patricia Neenan
through a combination of user fees, government support, and		
donor support. The doctors diagnose problems and		
http://www.plantwise.org/default.com/		
Community Knowledge Advisors: Many	Microfinance organizations	
microfinance/finance organizations conduct business with	Wilciofinance organizations	
their clients via mobile technology, and are often looking for		
ways to connect their farmers with extension resources		
AidData AidData provides a sourchable database of pearly	ESPL & Davalopment	
one million past and present aid activities around the world	Gateway- (Have an MOU to	
including extension projects	leverage geospatial	
nerusing extension projects.	technology to support	
	international aid projects)	