



FEED THE FUTURE

The U.S. Government's Global Hunger & Food Security Initiative

Partnering for Innovation

Semiannual Report #2

April 30, 2014



USAID
FROM THE AMERICAN PEOPLE



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EXECUTIVE SUMMARY

Feed the Future Partnering for Innovation, a five-year US Agency for International Development (USAID) program, partners with the private sector to identify and invest in agricultural technologies that can boost smallholder farmer productivity in developing countries. The program improves productivity and profitability for smallholders by: (1) commercializing innovative technologies; (2) assisting USAID Missions in Feed the Future (FTF) countries to directly and effectively engage with private sector partners; (3) showcasing successful and replicable private partnership models; and (4) capturing and exchanging pertinent information and best practices in technologies development, adaptation, and distribution at the bottom of the pyramid marketplace.

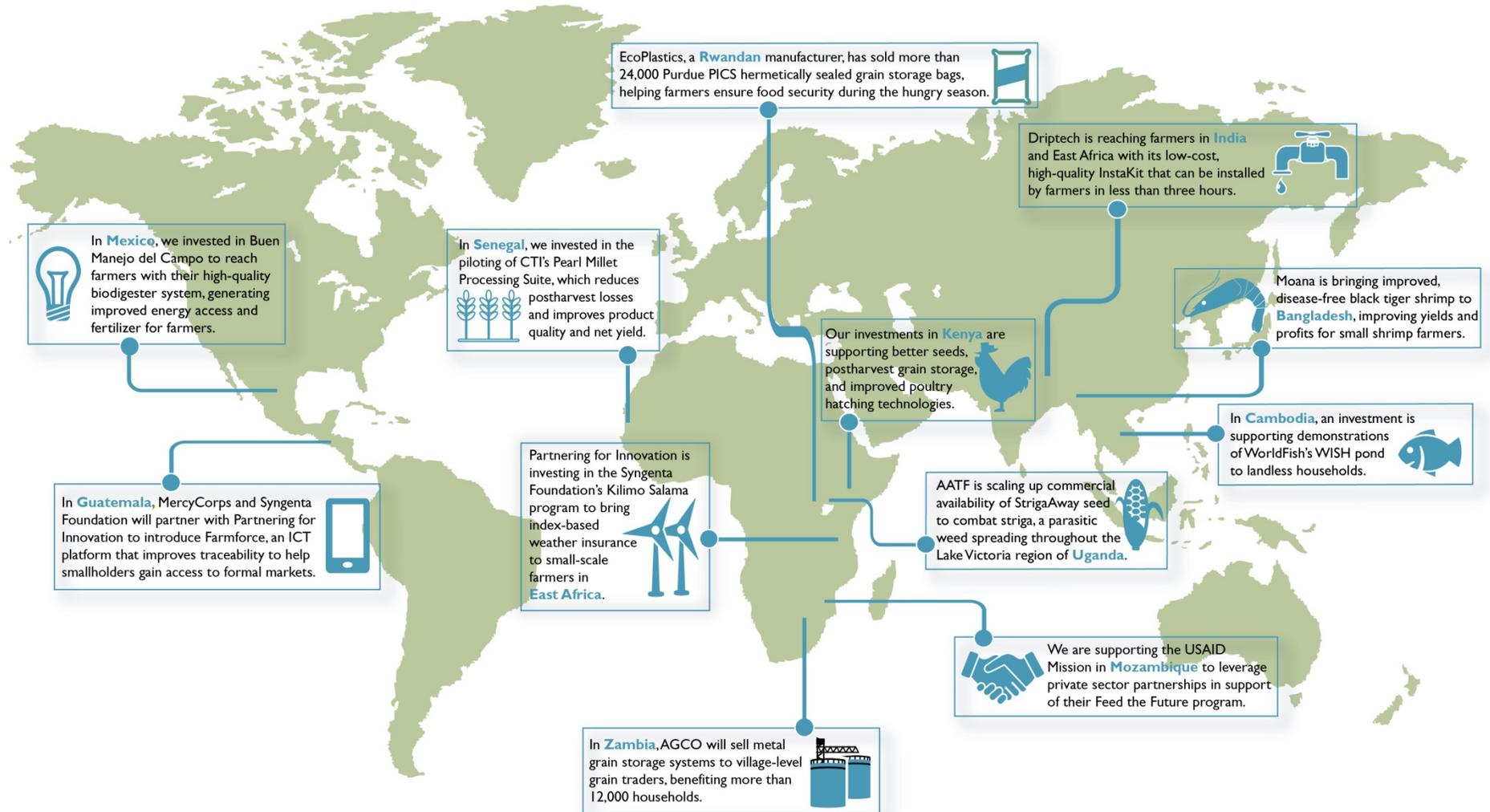
Commercialized Smallholder Technologies to Date

- Drip irrigation
- On-farm storage
- Grain processing
- Animal and aquaculture productivity
- Climate risk mitigation tools
- Inputs
- Seeds

Achievements during this reporting period included:

- The program awarded two commercialization grants for maize seed and broodstock shrimp are projected to reach 40,000 smallholders in four countries during grant duration.
- This brings the total of commercialized technologies to 14 in 17 Zones of Influence (ZOI) across seven FTF countries.
- Seven technologies were selected for commercialization during a second competitive solicitation process, with negotiations currently in final stages. Technologies include crop insurance, traceability systems, improved seeds and soil fertility, and hatchery and storage.
- Partners and subpartners increased for a combined total of 48, of which seven are New Alliance for Food Security and Nutrition Letter of Intent signatories. These include a broad cross-section of local and international agribusinesses, service providers, research organizations, universities, NGOs, local ministries, and financing institutions.
- Program grant allocation increased to \$9.5 million; in addition, grantees have agreed to invest \$5.6 million of their own financial resources (for grants rounds 1 and 2).
- Initiated buy-in activities with USAID/Mozambique to support private sector engagement goals in line with FTF country strategy.
- Designed framework for comprehensive new toolkit *“From Shareholders to Smallholders: A Guide to Optimizing Private Sector Partnerships to Create Shared Value in Emerging Markets.”*
- Increased monthly website visitors up to 10,000; hosted webinar *“How Leapfrog Technologies Will Change Agriculture”* with participation from 14 countries; and designed and tested the AgTechXChange, the program’s new online community, in preparation for a worldwide public launch.

Current Feed the Future Partnering for Innovation Global Activities



INTRODUCTION

Partnering for Innovation advances food security goals in FTF target countries by improving farmer access to critical agricultural technologies. The program works with private sector partners to scale existing innovations and develop sustainable marketing and distribution systems. It also supports USAID Missions worldwide to engage with private sector partners to meet their FTF goals. The program budget is \$66.9 million, of which \$52.5 million is allocated for technology commercialization and partnership grants.

Program Goals

Partnering for Innovation's goal is to improve the incomes of smallholder farmers, especially women, in developing markets. Projected outcomes include:

- Making proven agricultural technologies commercially accessible to smallholder farmers.
- Fostering mission-level partnerships to leverage private sector investment.
- Identifying, evaluating, and profiling effective private sector engagement models for use by USAID and other practitioners.
- Capturing and disseminating best practices in technology development, adaption, and distribution.

About This Report

This report summarizes activities and accomplishments by component for the reporting period of FY2014 (October 1, 2013 to March 31, 2014). Accomplishments include:

Component 1:

- Conducted field evaluations and negotiated milestone-based grants with seven organizations selected for market-entry and scale-up investments.
- Managed the implementation of market-entry and scale-up grants, including the successful completion of our first investment in Purdue University and local distributor EcoPlastics to sell on-farm maize storage bags (PICS) in Rwanda.

Component 2:

- Developed the USAID Mission partnership engagement process, including a scope of work and solicitation for new agricultural partnerships (SNAP) template.
- Conducted outreach and marketing on the mission partnership process.
- Initiated the first partnership activity with USAID/Mozambique.

Component 3:

- Created a template of technology transfer business models and drafted content for managing private sector partnerships.

Component 4:

- Produced events and created online tools to share best practices in technology development and commercialization.
- Created an interactive online community for information sharing and partnership development called the AgTechXChange.

COMPONENT I: AGRICULTURE TECHNOLOGY COMMERCIALIZATION

Between October 1, 2013 and March 31, 2014, the program supported the commercialization of four technologies through two newly signed subgrant agreements and expects to invest in seven additional technologies through six grantees by the end of September 2014.

Current Partnering for Innovation Investments

Smallholder farmers face a broad range of limitations, from environmental constraints to market barriers. Partnering for Innovation invests directly in private sector companies that have proven technologies to help address these challenges and supports them in addressing the marketing and distribution challenges of getting these technologies into the hands of smallholder farmers.

In the past six months, the program awarded grants to two new companies that are selling technologies with smallholder potential. African Agricultural Technology Foundation (AATF) was awarded Partnering for Innovation's biggest partnership to date with almost \$3.3 million for StrigAway, a maize seed resistant to witchweed, an invasive weed affecting a half million farm households in Kenya, Tanzania, and Uganda. Hawaii-based Moana Technologies, which is already selling pathogen-free broodstock shrimp in Bangladesh, received the second grant.

These two partnerships combined will impact the incomes of 40,000 smallholder farmers during their grant phases, with the potential to impact hundreds of thousands more once sustainably in market. Furthermore, six additional applicants are in negotiations to bring improved inputs, grain storage, weather index-based crop insurance, egg incubators, and electronic crop traceability to smallholder markets.

In addition to these two new grants, Partnering for Innovation previously awarded 11 grants, resulting in 14 total technologies across 7 FTF countries.¹ Five of these have already reached 16,000 farmers just in pilot stages, with almost all grantees still in the midst of achieving and reporting progressive sales milestones. Again, the ultimate potential once Partnering for Innovation has completed its grant support for product adaptations, marketing and distribution plans, and tests is staggering.

Water Resource Management: One hundred million acres of arable land in the developing world have the potential to support irrigation. Putting this land under irrigation would dramatically increase productivity and reduce susceptibility to climate vulnerabilities for smallholder farmers. Through three of its investments in Kenya, Zambia, and India Partnering for Innovation supports increased access for smallholders to efficient and lower cost drip irrigation products:

- Driptech inc. recently launched InstaKit Start20, a drip irrigation system designed to cover half an acre at a cost of \$165, making drip irrigation even more affordable to smallholders. By March 2014, 327 InstaKits were sold to smallholders, covering an equal number of acres of land.

"We are excited about bringing the innovations that have helped to green Israel to Africa for the first time with Feed the Future Partnering for Innovation."

*Naty Barak
Chief Sustainability Officer
Netafim*

"Partnering for Innovation is the most private-sector friendly program I have seen for leveraging technologies to increase food security."

*Tom Campbell
Institute for Critical Technology
and Applied Sciences
Virginia Tech*

¹ Does not include AATF Uganda, which is currently pending approval by USAID/Uganda.

- Through a partnership with Toro and MRI/Syngenta, iDE facilitated the expansion of smallholder drip irrigation kits in Zambia. Partnering for Innovation's investment allowed Toro to re-engineer its large-scale system into a smallholder kit that it is now available in Africa for the first time. MRI/Syngenta placed an initial order of 100 smallholder kits with longer-term plans to stock the kits in 580 of its shops nationwide.
- Netafim, AZMJ, and Amiran are working with two Kenyan banks, Family and K-Rep, to develop commercial loan packages for smallholders to purchase drip irrigation products. The packages include training, post-sales service, and vegetable production kits. A pilot with 300 farmers is underway in Lakipia in Kenya's Rift Valley.

Postharvest Processing and Storage: Postharvest losses lower smallholder incomes across the African continent. According to the World Bank, more than 30 percent of maize production in East Africa is lost from harvest to sale. By making effective storage technology available at the farm and market level, smallholder farmers can save millions of dollars in product losses. Through investments in Rwanda, Kenya, Senegal, and Zambia, Partnering for Innovation supports storage technologies scaled for smallholder production levels:

- Purdue University has introduced its PICS bags to the Rwanda and Kenya markets to target storage of maize, beans, and coffee. Local manufacturers and distributors produce and market these hermetic grain storage bags, which sell for less than three dollars. Local distributor EcoPlastics has already sold more than 24,000 bags in Rwanda.
- Compatible Technology International (CTI) has sold nearly \$7,000 worth of multiple-use pearl millet processing tools in Senegal that improve postharvest grain recovery by up to 20 percent and dramatically reduce drudgery for women who do the bulk of this work. CTI is currently negotiating with a local manufacturer to decrease the tool price even further and ensure sustainable availability of the product at the end of the grant period.
- Pending approval, multinational AGCO will introduce metal grain storage silos that have the potential to change the smallholder maize market and increase household income. As a result, 12,000 smallholders are expected to access improved storage and increase their income by holding onto their product until market conditions are favorable.

**Grantee Spotlight: Purdue Rwanda
Preventing Postharvest Losses,
Sales Targets Exceeded by 66 Percent**

More than 1.6 million smallholder households in Rwanda grow staple crops such as maize and beans for family consumption and sale. Postharvest losses of these two crops exceed 30 percent as most farmers have only traditional storage methods for their surplus.

With Partnering for Innovation support, the Purdue Improved Crop Storage (PICS) bag is helping these farmers address this problem. At \$2.50 per bag, these triple-lined plastic bags allow farmers to adjust the bag size to the volume that they have for storage, known as "volume neutral," and still allow for the bag to be hermetically sealed, preventing insect damage, and hindering rodents. Purdue joined forces with local plastics recycler, EcoPlastics, to manufacture and distribute bags throughout the country. The program's investments also covered manufacturing startup costs and marketing materials development.

EcoPlastics markets PICS by comparing them to bags of grain traditionally stored. "When farmers see the difference in grain from traditional bags compared to PICS bags, they are sold," said EcoPlastics Manager Wenceslas Habamungu. "From there it is word of mouth and interest grows quickly." The pilot investment had a target of 15,000 bags sold in the first year, and Habamungu reports selling 24,000.

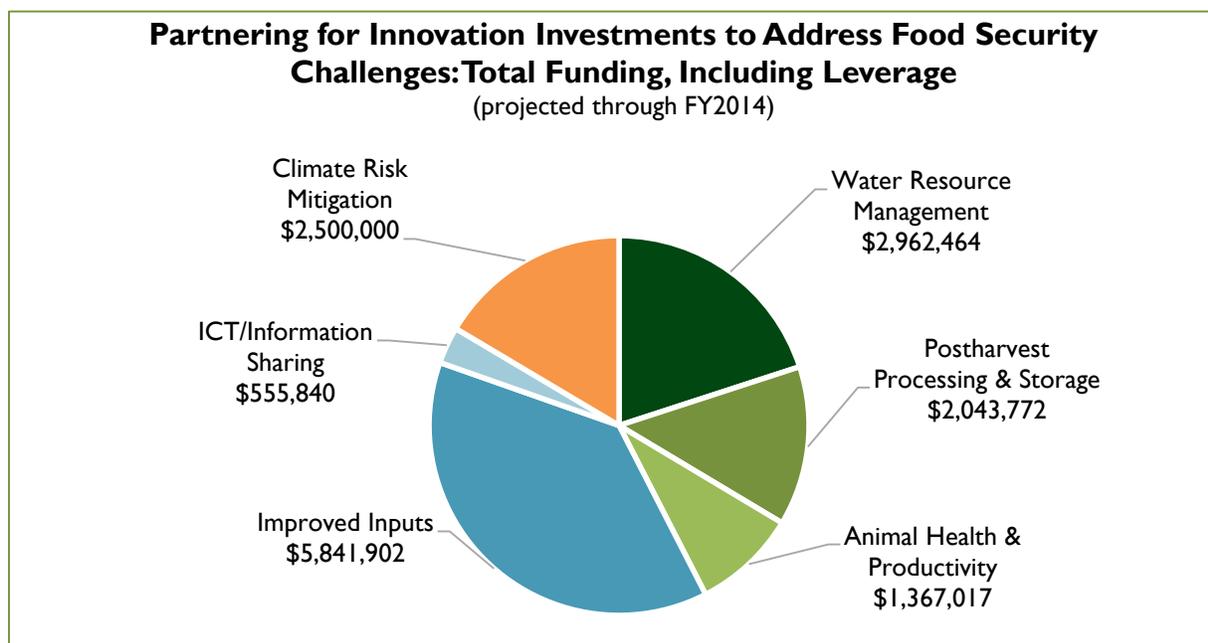
Improved Inputs: Improved seeds and other inputs can dramatically boost farmer yields and control weeds and other pests without heavily relying on pesticides. However, farmers also need exposure to production options through demonstrations, on-farm trials, and other extension services. Establishing

these programs is expensive and a major barrier to introducing new products, so Partnering for Innovation supports demonstration plots, learning events, and after-sale support so that farmers can access professional advice in Kenya, Tanzania, and Uganda. Partnering for Innovation is addressing two input challenges in East Africa, including the following:

- Striga, or witchweed, has devastating effects on maize production throughout the Lake Victoria region in Kenya, Tanzania, and Uganda, reducing yields by up to 80 percent on 1.4 million hectares. AATF, with CIMMYT, BASF, and six private seed companies, is commercializing StrigAway, a hybrid maize seed that is resistant to striga in fields where it is planted.
- Maize lethal necrosis (MLN) is another significant disease attacking maize production in Kenya. Partnering for Innovation is currently negotiating an investment in Western Seed Company to produce 90 tons of MLN-resistant seed for sale to smallholders.

Animal and Aquaculture Productivity and Health: Demand for animal and fish products continues to increase in FTF countries. Improvements in breeds, feed, and animal health are critical to the growth of these industries. Partnering for Innovation is investing in improved health, productivity, and breeding in Rwanda and Bangladesh:

- Rwanda is currently promoting a nationwide dairy production program; however, mastitis causes estimated annual losses in smallholder herds of up to \$400 per cow. Partnering for Innovation has invested in PortaScience’s UdderCheck dipstick to support a low-cost, easy method to detect mastitis.
- Moana Technologies is introducing specific pathogen free black tiger shrimp to Bangladesh for production of post larvae shrimp. Moana has selectively bred black tiger shrimp to improve size and disease resistance. It is being sold as broodstock to 1,000 shrimp farmers who will see a 65 percent increase in production volumes and 30 percent price premium.



For a complete update of Partnering for Innovation’s current and pending grants, please see Annex II.

Second Solicitation for Partnering for Innovation Investments

In addition to Partnering for Innovation's current partners, seven potential grantees were selected from 307 applicants during the program's second solicitation. Moana Technologies was signed in early 2014. AGCO, MEA, Mercy Corps, Syngenta Foundation for Sustainable Agriculture (SFSA), Surehatch, and Western Seed, and all are currently in negotiation. The negotiation phase includes rigorous on-site due diligence and establishment and approval of milestones. The chart below reflects this process in more detail:

Grantee Name	Original Target Proposed	Final Milestones
Moana Technologies	Proposed sale of broodstock to two hatcheries.	Incorporated written protocols and certifications to confirm biosecurity controls at hatcheries. Required one-on-one trainings for hatchery management; workshops for additional hatcheries and government officials from Ministry of Fisheries.
AGCO	25 demonstration units nationwide, with no sales proposed across three target markets: individual farmers, micro-warehouse operators, and small traders. Estimated 505 farmers affected nationwide.	40 silos sold to local grain traders benefitting an estimated 12,000 farmers in three target provinces including the FTF ZOI.
MEA	Scale-up of factory, demonstration plots, and marketing efforts. No sales targets were proposed.	Expanded from a 12-month activity to an 18-month activity in order to add sales milestones following the scale-up of the factory. Enhanced marketing efforts to focus not just on product quality but also brand recognition.
Mercy Corps with SFSA (Farmforce)	Full implementation of traceability system with one exporter. Two additional subscriptions purchased by exporters.	Increased exporters purchasing system from two to six. Incorporated technology launch event and introductory subsidy for initial four companies purchasing the software.
Surehatch	Sale of 200 incubators in peri-urban Nairobi with general poultry management workshop, no mention of FTF ZOI impact.	Sale of 250 incubators in FTF ZOIs. More robust trainings in terms of number of trainings offered, health and hygiene topics, and business management of small hatcheries.
SFSA (Kilimo Salama)	\$3 million, three-year proposal to provide weather index-based crop insurance and mortality-based dairy livestock insurance in five TBD countries in East Africa. Sales targets were proposed for all countries.	\$1 million, two-year activity to support weather index-based crop insurance scale-up in Rwanda, pilot in Tanzania, and feasibility study in one new country. Addition of gender integration strategy, impact analysis, and competitive solicitation for re-insurance.
Western Seed	Originally, proposed four improved maize varieties including drought and disease tolerance. Milestones focused on training and demonstrations. \$1.4 million budget over three years.	Focus exclusively on MLN tolerant variety due to immediate smallholder need and questionable performance of other varieties. Additional targets added to include 90 MT of seed produced and 85 MT of seed sold over an 18-month period for \$400,000.

COMPONENT 2: PARTNERSHIP DEVELOPMENT

Component 2 works with USAID Missions in FTF countries to facilitate partnerships with private sector companies. During this reporting period, program staff participated in the USAID Global Learning and Evidence Exchanges (GLEE) in Addis Ababa, Ethiopia and Bangkok, Thailand. With USAID staff from Africa, Middle East, and Asia present, Partnering for Innovation participated in panel discussions on public-private partnerships, led small group presentations, and introduced program services.

As a direct result of GLEE in Ethiopia, USAID/Mozambique expressed interest in buying into the program. In March 2014, program staff conducted an in-depth assessment in Mozambique to meet with potential partners and identify areas for intervention. Immediately following the trip, the team drafted a SNAP, which is currently pending review by the mission. During the trip, Partnering for Innovation met with more than 20 businesses (including ETG, Olam, Lusosem, and Mozfoods) and nonprofit organizations, as well as mission staff in Maputo and FTF ZOI. Mozambique has made an initial commitment of \$3 million with an additional \$12 million under consideration.

In addition to Mozambique, program staff met with four other missions to introduce program services available for buy-in:

- USAID/Malawi expressed interest in buy-in, and a field visit is planned for June 2014.
- In January 2014, program staff met with USAID/Zambia. As an alternative or addition to a full buy-in, it was explained that the mission has the option of extending current and pending investments, such as the AGCO partnership.
- In March 2014, program staff met with USAID/Guatemala during a site assessment for the Mercy Corps/Syngenta Foundation investment. The mission was unaware of the opportunity for buy-in and requested further information. They indicated potential interest in using the program to support their scaling plan, which includes introducing improved legume varieties and traceability systems.
- Also in March, program staff met with USAID/Rwanda, which had recently received two dozen private sector inquiries and was in the midst of assessing how best to respond to engagement requests (follow-up imminent).

“We have good ideas but can’t do complicated proposals. We like that the Partnering for Innovation approach is simple and focuses on the bottom line.”

*Carlos Henriques
Chief Executive Officer
Mozfoods*

COMPONENT 3: DESIGN AND ANALYSIS OF INVESTMENT MODELS

Partnering for Innovation is developing a toolkit to assist USAID Mission staff in building effective private sector partnerships to support FTF goals. In FY2013, program staff researched and documented 14 partnership and technology commercialization models. Expanding on these efforts, an outline was developed during this reporting period entitled “*From Shareholders to Smallholders: A Guide to Optimizing Private Sector Partnerships to Create Shared Value in Emerging Markets.*”

From Shareholders to Smallholders will be a comprehensive, user-friendly toolkit that provides guidance on the following topics:

- Identifying, evaluating, and optimizing corporate partnership opportunities.
- Converting a preliminary corporate engagement lead (i.e. Letters of Intent) into a successful corporate partnership.
- Defining a corporate partnership shared value proposition to assure both corporate, donor, and smallholder interests are guaranteed.
- Identifying and classifying business model types critical to assuring effective due diligence, including identifying and mitigating risks, in order to make informed decisions.
- Approaching and supporting new market entry and supply chain strategies and business models.
- Assessing and comparing commercialization opportunities.

It will provide not only a broad overview of strategic approaches to corporate partnerships, but also clear, straightforward model profiles of each possible private sector partnership model, including some 20 categories such as smallholder farmer aggregator, direct procurement, and local acquisition. Each model will be presented as a stand-alone, four-page insert that describes the following:

- The market and partnership context.
- The model in narrative and visual formats.
- A standard risk and complexity and social and financial return rate based on an assessment of common model characteristics.
- A case study of the model in action.
- Evaluation parameters, which include questions and a summary of critical success factors.

The guide is designed for USAID Missions, businesses, and partners. The private sector partnership toolkit is expected to be completed and ready for review by July 2014. It will later be posted online on the AgTechXChange to form the basis for a community of practice, facilitated by the Component 3 Lead.

“Feed the Future Partnering for Innovation is the most international business-oriented grants program I have seen to date.”

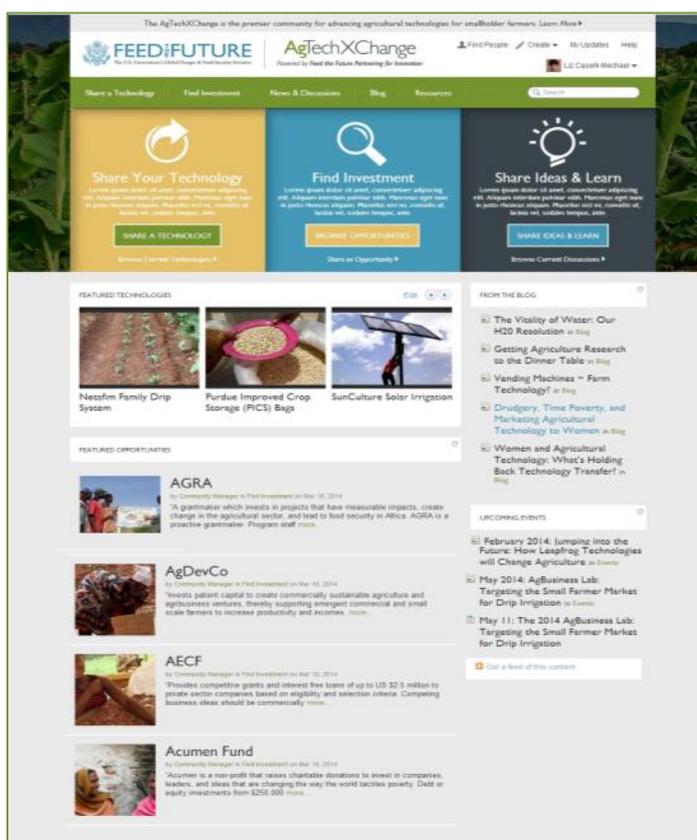
Bill Diederich
Senior Executive Vice President for
Agri-Business
BiOWiSH Technologies

COMPONENT 4: KNOWLEDGE EXCHANGE

Partnering for Innovation has become a comprehensive resource for learning, analysis, dialogue, and interaction among development practitioners, research institutes, universities, commercial companies, donors, program partners and grantees, and other stakeholders with an interest in agricultural technologies geared to the smallholder farmer. We have posted training materials, educational videos, and company profiles to our state-of-the-art website; hosted webinars; and created topical blogs. And with the design and launch of the new [AgTechXChange](#) community at the end of this reporting period, we are solidifying our reputation as the go-to hotspot for networking.

Achievements this reporting period include:

- Website links to more than 100 technical resources, two dozen featured technologies, and a vetted database of private, nonprofit, and government funding opportunities for agricultural technology commercialization.
- The program organized a seminar in conjunction with the World Food Prize and Borlaug Dialogue in Kansas City on models for effective technology transfer, including grantee presentations from Driptech and AATF. A program blog and video of the event ([Accelerating Agricultural Technology Transfer](#)) are posted to the program website.
- The Partnering for Innovation webinar on [How Leapfrog Technologies Will Change Agriculture](#) attracted participants from 14 countries including Guatemala, Burma, Tajikistan, and Zambia. Speakers from the US, Uganda, and Kenya discussed why technology leaps are critical for developing countries and provided examples of two technologies: solar-powered drip irrigation and mobile-based banking for smallholder farmers. This was followed by more than an hour of Q&A from participants around the world.
- A dozen drip irrigation distributors from FTF countries in Africa will attend the second Partnering for Innovation [AgBusiness Lab](#) on May 12-15 in Arusha, Tanzania. The focus this time will be on scaling, marketing, and distributing drip systems for smallholders, with on-site, hands-on experts available to assist participants with product development, financing, and business planning. Participants will include Guy Phipps from Texas A&M University; Lorna Grace, World Bank consultant; and several field-based Fintrac agronomists.



- The program continues to follow participants from the [2013 AgInvestor Lab](#): PanXchange reported that it received USAID support to open the first electronic grain trading facility in Kenya; Sistema Biobolsa has established four community digestors servicing 172 farmers; and CRS joined forces with CTI to assess the market for the company's smallholder groundnut suite in Zambia.
- Partnering for Innovation's online presence and outreach continues to grow, including more than 600 members who belong to the program's [LinkedIn Group](#); more than 1,300 followers on Twitter and other social media platforms; and an average of nearly 9,000 visitors a month to the website.



The AgBusiness Lab from May 12-15 in Arusha, Tanzania will include a dozen drip irrigation distributors from FTF countries in Africa.

- The program published six new Technologies of the Month, including a protein sorter for aflatoxin, pathogen-free black tiger shrimp, StrigAway weed resistant seed, the Promethean Power rapid milk chiller, water-efficient maize, and a solar-powered drip irrigation kit. More information available at <http://partneringforinnovation.org/featured-technology.aspx>.
- In addition, the program wrote 10 blogs on topics ranging from trends in smallholder agricultural technology to what's preventing technology transfer to women farmers. Blogs are located at <http://www.partneringforinnovation.blogspot.com/>.

PROGRAM IMPACT

Program monitoring tracks the two main indicators required in Partnering for Innovation's cooperative agreement, as well as additional indicators related specifically to technology commercialization and partnership subawards. The table below shows results to date against indicators. Targets for the program are currently in negotiation with USAID; final targets will be reflected in the next annual report.

Indicator 4.5.2-12 Number of public-private partnerships formed as a result of Feed the Future (FTF) assistance							
Component #	Year 1 Actual	Year 2 Target	Year 2 Actual to Date	LOP Target	Actuals to Date	Balance to Date	
1. Agriculture Technologies Commercialized	11	8	2	19	13	6	
2. Partnership Development	0	4	0	15	0	15	
Indicator 4.5.2-38 Value of new private sector investment in the agriculture sector or food chain leveraged by FTF implementation (US\$,000)*							
Component #	Year 1 Actual	Year 2 Target	Year 2 Actual to Date	LOP Target	Actuals to Date	Balance to Date	
1. Agriculture Technologies Commercialized	0	\$1,782	\$236	\$13,124	\$236	\$12,888	
2. Partnership Development	0	0	0	\$13,124	0	\$13,124	
Additional FTF Indicators for Subgrants, Other Indicators for FTF-PI							
Indicator #	Indicator Description	Year 1 Actual	Year 2 Target	Year 2 Actual to Date	LOP Target	Actuals to Date	Balance to Date
4.5.2-2	Number of hectares under improved technologies or management practices as a result of USG assistance	30	43,451	101	153,206	131	153,075
4.5.2-5	Number of farmers and others who have applied new technologies or management practices as a result of USG assistance.	7,483	57,401	9,005	375,889	16,488	359,401
4.5.2-39	Number of technologies or management practices made available for transfer as a result of USG assistance.	15	12	4	28	19	9
TBD	Number of technologies commercialized in FTF countries	6**	11	3†	17	9	8
	Number of program-assisted technologies with initial market sales in FTF countries	2	12	3	17	5	12
TBD	Investment Design/Models	0	7	0	20	0	20

* Results are only leverage reported to date. However, \$1.8 million was committed in leverage during Year 1, and \$782,000 has been committed so far in Year 2 (total of \$2,582,580 committed in leverage).

** FTF countries are not specified in Driptech's SMOG; therefore, we have not counted the award toward this number.

† AATF in two FTF countries; Moana in Bangladesh.

CHALLENGES AND SOLUTIONS

Technology Commercialization Grants

- The World Cocoa Foundation (WCF) was unable to receive approval from the government's implementing partner, the Conseil du Café-Cacao (CCC) to launch its mobile application. The application would have enabled village-based community knowledge workers to provide cocoa extension services and collect and send data through a mobile-phone platform. However, decisions made by the government, outside of our control, disallowed us from moving forward. A key lesson learned is that Partnering for Innovation should have a more thorough understanding of the enabling environment issues that could potentially affect its investments. This is especially true for Internet and cell phone technology. However, the program's milestone funding approach stopped the investment process early enough to avoid a large loss.
- Due diligence on Schutter Energy for Takamoto PAYG Biogas took place in 2013. Despite claims, the gas metering system, a key innovation of the proposal, was not ready for marketing. As a result, the team recommended a six-month delay while the applicant put in place the metering technology for marketing. During this period, one of the two owners of the company resigned from Schutter Energy. Company leadership changed the strategy from using pay-as-you-go metering technology to an annual subscription charge. Schutter Energy is a small company in its startup phase and the departure of the founder at a critical time, as well as changes to the business plan, increased the investment's potential risk, which led to cancellation of the grant.

Investment Models

- The team presented preliminary models for *Accelerating Technology Transfer in Agriculture* as a side event at the World Food Prize and at the AgSector Council's October webinar. These models represented ways the commercial sector transfers technology to smallholders, and additional consultations with USAID broadened the objective to include partnership engagement and models for sourcing product from smallholders. Since new staff with strong backgrounds in developing strategies for public-private partnership development joined the program in February, there has been significant progress in expanding and deepening our foundational work, and additional case studies and other examples are being added to a new comprehensive toolkit that will be completed in the next reporting period (and then continually updated and revised).

Knowledge Exchange

- Communities of practice are an integral part of the program, and the team conducted extensive research into platform developers that could provide hosting capabilities. Initially, Ashoka Changemakers was identified to use its interactive platform for online communities that integrate the grant application and review process. Since Ashoka required branding that did not fit the Partnering for Innovation branding requirements, the team had to shift its concept and selection. Using ideas generated through discussions with other platform designers, program staff created components that are now being realized through the Jive platform used by 7Summits to implement the AgTechXChange concept.

Staffing

- During this reporting period, there was substantial key personnel and other staffing transition. The end result is a stronger, more experienced team, and a potential reconfiguration of team assignments that will provide additional support staff, particularly for our Grants Director. We hired new Component 2 & 3 Leads in this period, and replaced one of our technical analysts. Currently the only position open is the Component 1 position, vacated at the end of March.

Discussions are underway to ensure the staff structure will provide adequate support to grantees in the post-grant award phases of business and distribution development.

ANNEX I: WORK PLAN

PARTNERING FOR INNOVATION YEAR 2 WORK PLAN		Qtr 1			Qtr 2			Qtr 3			Qtr 4			Target	Milestone, Deliverable	Indicator Target		Notes on progress to date		
		Oct-13	Nov-13	Dec-13	Jan-14	Feb-14	Mar-14	Apr-14	May-14	Jun-14	Jul-14	Aug-14	Sep-14			To Date	Balance			
PROJECT ACTIVITIES																as of:	3/31/2014			
I	Technology Commercialization & Partnerships Component																			
I.1	Task: Technology Commercialization																			
I.1.1	Share innovative technologies with program audience, private sector, and other stakeholders.		x			x			x					x		4	Technologies highlighted through presentations/ other public forums	4	0	PortaScience highlighted in FTF Newsletter; Leapfrog Technologies webinar highlighted SunCulture solar drip irrigation; Driptech and AATF highlighted at World Food Prize.
I.1.2	Maintain the program's technology database, evaluating technologies that have applications to the smallholder sector as well as companies and other partners who have the potential to transfer these technologies to the bottom of the pyramid market.				x											1	Technology database for FTF priority countries updated and maintained	1	0	This is being updated in tandem with I.2.1 as a more comprehensive list of technologies, countries, and missions.
I.1.3	Maintain database of companies, research institutions/universities, etc. to feed into the Knowledge Exchange for investors, technology innovators, donors, and other projects.													x		1	Partner database updated and maintained	1	0	This is updated in Salesforce with Letter of Intent (LOI) companies entered and marked as such.
I.1.4	Provide technical assistance and capacity building to grantees					x								x		2	Trips for grantee capacity building to improve grant impact	1	1	AATF received TA in work planning and we are hiring STTA for implementation.

1.3.3	Share models toolkit with year 2 models.												x	3	Toolkits for each of the three models identified in Year 2	0	3	On track for deliverables in September.					
1.3.4	Evaluate and record commercialization model case studies.												x	14	Model case studies and related technologies profiled in a catalog	0	14	We will be identifying case studies both within our grants and non-FTF-PI cases					
1.3.5	Conduct private sector assessments in response to mission needs.												x						2	Up to two assessments for missions providing buy-in for Partnering for Innovation.	0	2	Delayed due to delay in partnership component. Assessments will most likely be for Mozambique and Malawi.
2	Knowledge Exchange Component																						
2.1	Task: Knowledge Exchange Platform																						
2.1.1	Redesign website to be an integrated, searchable database that will allow stakeholders and interested private sector entities to access information, connect with potential partners, and join discussions.	x	x	x	x									1	Fully integrated website for project	1	0	This is complete.					
2.1.2	Website updates, blogs, Twitter posts, and other public discussions on technical topics, current events around agricultural innovation, etc.	x	x	x	x	x	x	x	x	x	x	x	x	15,000	Average monthly visitors on program website	8,960	6,040	We expect to reach our goal after launch of AgTechXChange.					
2.1.3	Expand corporate reach by contacting companies strategically. Send targeted messages/invites to event or webinar.	x	x	x	x	x	x	x	x	x	x	x	x	250	Vetted companies added to program outreach database in Year 2	145	105	This is on track.					
2.2	Task: Communities of Practice																						
2.2.1	Design, development, and implementation of communities of practice around identified critical topics.													3	Communities of practice around identified critical topics	1	2	The AgTechXChange platform will go live in April; in the meantime we have been building up the overall Partnering for Innovation Community of Practice for an effective move over to the AgTechXChange.					

2.2.2	Online engagement of communities of practice (technical content sharing, blogs, webinars, tweets, and other forums).	x	x	x	x	x	x	x	x	x	x	x	x	24	Blog posts, webinars, or tweets engaging communities of practice	10	14	See above for COP information. This indicator counts the number of technical blog posts this year.
2.3	Task: Outreach																	
2.3.1	Conduct outreach presentations at key events such as Scaling GLEE, webinars, MPI/HUB, etc.			x	x									1	Set of outreach materials developed to address outreach at various events.	1	0	Created a mission partnership brochure, fact sheet, and timeline for these types of events.
2.3.2	Develop and provide background investment and country information				x		x		x		x		x	5	Countries profiled	5	0	Mozambique, Guatemala, Zambia, India, and Cambodia.
2.3.3	Conducting or participating in webinars on topics identified as needed (e.g., sharing innovative technologies, presenting innovative business models, communities of practice-focused knowledge sharing, etc.).	x				x				x			x	4	Webinars with average attendance of 50	2	2	Speaker/expert role in the AgriLinks webinar in October on Scaling Public Private Partnerships; hosted the Leapfrog Technologies webinar in February with almost 100 participants.
2.3.4	Develop short videos giving an overview of key FTF-PI events and technology innovations.		x			x				x			x	4	Videos	1	3	World Food Prize session highlights video produced in October. Possible other videos include clips from the AgLab, other training or success story videos.
2.4	Task: Learning Events																	
2.4.1	AgInvestor Lab, Washington, DC, invite-only							x						1	AgInvestor Lab	0	1	Arusha in May
2.4.2	Outreach to previous AgInvestor Lab participants	x			x			x				x				0	0	We have been doing this on a regular basis.
2.4.3	Participate in informational forums, attending targeted outreach activities at key events to engage private sector, develop contacts.	x		x	x		x	x		x	x		x	8	Event presentations, tech talks, or other direct outreach through events	5	3	This year we have presented in the following forums: World Food Prize; Presentation to Pioneer; Presentation to UC Davis; GLEE in Addis; GLEE in Bangkok.
3	Grants Component																	
3.1	Task: Refine Grants Competitive Process																	

3.1.1	Update grants manual.	x	x											1	Grants manual updated and approved by USAID	1	0	Approval pending modified language as provided by USAID.
3.1.2	Develop SNAPs for up to two missions		x	x					x	x				2	SNAPs developed	0	2	First SNAP will be conducted in May 2014.
3.1.3	Debrief after solicitation periods to improve the grantmaking process.					x							x	2	Debrief meetings after Rounds 2 and 3	1	1	PI staff and USAID AOR met in November to debrief on the process.
3.2	Task: Outreach and Capacity Building																	
3.2.1	"How to Get a Grant" Video			x										1	Video	0	1	Planned for April/May (in time for May 19 EOI launch).
3.2.2	Building partnerships between USAID and the private sector: invite-only webinar with LOI companies.								x					1	Webinar	0	1	Will do this post-Mozambique (delayed due to mission delay).
3.2.4	Case studies on learning/impact of grantees (these can be for public consumption too).							x						2	One each for semi-annual and annual reports	0	2	We decided to wait until grants closed out to gather information on the overall impact. We will plan these for later in the year.
3.2.5	In-person and email outreach to research institutions to advertise the program and assist with application and commercialization strategy.	x	x	x	x											0	0	This has been ongoing.
3.2.6	Communications capacity building for grantees.			x										1	Grantee Communication Guide	1	0	Completed in December.
3.2.7	Introduce SNAP program capabilities to missions to generate buy-in.				x	x				x	x			2	Missions with APS programs through FTF-PI	1	1	Mozambique; Malawi pending.
3.3	Task: Increase Mission Buy-in																	
3.3.1	Determine mission budget/potential for buy-in, determine mission technology priorities.	x														0	0	On track per discussions with Laura Cizmo and missions.
3.3.2	Obtain mission funding for mission-specific partnership agreements.				x								x	2	SNAPs released - timing dependent on missions	0	2	Anticipate Mozambique and Malawi.
3.3.3	With mission buy-in, convert existing pilot awards to commercialization awards.								x				x	2	Pilot awards to commercialization awards with partial mission buy-in	0	2	We plan to begin discussions with relevant missions as Round 1 grants come to an end and opportunity for scaling becomes clearer.

3.7.9	SMOG 01-05 Netafim												x	500	Sales, in thousands of USD, of smallholder drip irrigation kits	0	500	No sales yet	
3.7.10	SMOG 01-06 Purdue Kenya												x	22,500	PICS Bags manufactured (with 17,500 bags sold)	16,810	5,690	16,000 PICS bags sold to date. We expect them to exceed their targets.	
3.7.11	SMOG 01-07 iDE												x	100	Toro drip irrigation kits sold to end users	0	100	100 kits sold to MRI (distributor); awaiting resale to farmers to count this.	
	SMOG 01-09 AATF												x	200	MT of IR maize sold in Kenya, Tanzania, and Uganda	0	200	Grant just began activities.	
3.8	Task: Grant Implementation M&E																		
3.8.1	Develop tracking system to track all grant indicators together for streamlined reporting	x	x											1	Tracking system live	1	0	USAID has sent M&E plan comments to FTF-PI for incorporation into final plan.	
3.8.2	Monthly reports on WIG and Sub-WIG achievements; monitor progress	x	x	x	x	x	x	x	x	x	x	x	x	12	Monthly reports on grant progress/results	6	6	These are on track.	
3.8.3	Conduct periodic field visits for information verification and reporting						x					x		2	Field visits focused on "deep dive" into results and data verification	0	2	After discussions with Fintrac M&E experts, we have decided to wait for more results before doing a deep dive (most likely we will conduct these post-grant)	
3.9	Task: Knowledge Exchange M&E																		
3.9.1	Monitor website traffic; participation in online forums and FTF-PI sponsored in-person events; report on metrics	x	x	x	x	x	x	x	x	x	x	x	x	12	Monthly reports on web traffic, blog visitors, webinar attendees, contacts database disaggregation	6	6	Reports are saved internally.	
4	Program Reporting																		
4.1	Task: Submit Deliverables per Cooperative Agreement Requirements																		
4.1.1	Monthly updates	x	x	x	x	x	x	x	x	x	x	x	x	12	Updates	6	6	These are on track.	
4.1.2	Tech of the Month	x	x	x	x	x	x	x	x	x	x	x	x	12	Tech of the Month	6	6	These are on track.	
4.1.3	Semiannual/annual reports	x						x						2	Reports	1	1	These are on track.	
4.1.4	Quarterly financial reports			x			x			x			x	4	Quarterly Financial Reports	2	2	These are on track.	

ANNEX II: COMPREHENSIVE GRANTS TABLE

Sub Grantees	Partners	Milestones	Technology	Progress Update	Country	Type	Date of Award	FTF-PI Grant Amount	Estimated Leverage
Water Resources Management									
Driptech	N/A	1,000 farmers purchase customizable, drip irrigation kit.	Customizable 0.5 acre and 1 acre drip irrigation in a box	327 InstaKits sold through 52 distributors in 8 countries	India	For profit	7/5/2013	\$400,000	\$327,350
Netafim	Amiran Kenya, AZMJ	\$10 million worth of drip irrigation and TA packages financed through new loan mechanism benefiting 2,000 farmers.	500 m2, 0.5 ha, 1 ha small holder drip irrigation kits	Finance program with local banks designed and launched for 300 farmer pilot	Kenya	For profit	9/10/2013	\$993,940	\$952,048
iDE	Toro Irrigation	100 farmers purchase Toro drip irrigation system, available in Africa for the first time.	500 m2 smallholder drip irrigation kit	Order for 100 kits placed, currently pending delivery	Zambia	Nonprofit	9/19/2013	\$216,248	\$72,878
Postharvest Processing/Storage									
Purdue (Rwanda)	EcoPlastics	15,000 farmers purchase grain storage bags reducing postharvest losses.	Hermetic grain storage bags	COMPLETED. More than 24,000 bags sold, exceeding the target by 60%. EcoPlastics predicts that it can sell more than 280,000 PICS bags in the next 5 years.	Rwanda	University	3/27/2013	\$149,500	\$0
Compatible Technology International	N/A	\$15,000 pearl millet processing suites purchased, with local manufacturers and distributors identified and recruited for subsequent sales.	Pearl millet processing suite comprised of a grinder, winnower, thresher, stripper	\$6,980 in sales and initial negotiations begun with local manufacturer SISMAR	Senegal	Nonprofit	7/29/2013	\$387,911	\$20,196

Purdue (Kenya)	Bell Industries	17,500 farmers purchase grain storage bags reducing postharvest losses.	Hermetic grain storage bags	5,000 bags sold and over 5,700 farmers trained of which 69% were women	Kenya	University	9/27/2013	\$386,201	\$34,464
Catholic Relief Services (CRS)	Compatible Technology International	Assessing the potential for a ground nut shelling suite for the 700,000 smallholder groundnut producing households in Zambia.	Ground nut processing technology suite	COMPLETED. Report/ Commercialization Strategy Completed	Zambia	Nonprofit	8/9/2013	\$10,000	\$0
AGCO	Grain Storage International Africa, Yabema Grain, Musika	Sales of 40 silos benefitting more than 12,000 smallholders.	Small-scale metal grain storage tanks	In negotiation	Zambia	For profit	In negotiation	\$400,000	\$655,500
Animal/Aquaculture Health & Productivity									
WorldFish	N/A	50 farmers benefit from individual fish ponds and water that can be used for kitchen gardens.	Individual fish ponds	In process	Cambodia	Nonprofit	8/1/2013	\$10,000	\$0
PortaScience	African Breeder Services Total Cattle Management, local agrovet	\$25,000 worth of UdderCheck and related animal hygiene products sold benefitting upwards of 600 farmers with potential to increase profitability in the Rwandan milk industry by \$6 million.	Dip stick detecting mastitis in cows	300 farmers trained at 6 milk collection centers	Rwanda	For profit	8/22/2013	\$399,371	\$28,290

Moana Technologies	Bangladesh Shrimp and Fish Foundation	1,000 small farmers will buy and grow pathogen free shrimp resulting in 40-65% increase in production volumes per hectare and upwards of 30% price premium.	Disease-free shrimp	450 broodstock arrived in Bangladesh	Bangladesh	For profit	3/10/2014	\$398,286	\$171,070
Surehatch	N/A	250 smallholders farmers will be business owners and have the ability to expand the number chickens sold in the local market.	Smallholder egg incubators	In negotiation	Kenya	For profit	In negotiation	\$260,000	\$100,000
Improved Inputs									
Sistema Biobolsa	N/A	Installation of four new demonstration systems benefitting 100 farmers in four new regions in Mexico.	Small scale biodigesters	COMPLETED: Reached 176 farmers in 4 demonstration sites with 5 immediate sales and a waiting list of more than 86 farmers for sales, pending financing.	Mexico	For profit	8/2/2013	\$10,000	\$0
African Agricultural Technology Foundation	CIMMYT, BASF, six local seed companies	955 MT of StrigAway will be sold, benefitting 39,000 farmers in three countries. AATF and its partners will bring StrigAway to smallholders in Kenya, Tanzania, and Uganda, where Striga affects approximately 1.4 million hectares of land.	Hybrid seed	220 demonstration plots with 30% managed by women are currently being planted. Seed production is underway in Kenya.	Kenya, Tanzania, Uganda	Nonprofit	1/15/2014	\$3,287,405	\$976,284

Western Seed Company	N/A	Sale of 85 MT of improved MLND disease-resistant seed reaching 20,000 smallholder farmer households.	Stress tolerant hybrid maize seed varieties	In negotiation	Kenya	For profit	In negotiation	\$360,000	\$700,000
MEA Limited	University of Nairobi , WeRATE	Over the course of the grant period, MEA will sell over \$40,000 comprised of 73,000 Biofix packets ranging from 10, 20, and 50 gram packets.	Rhizobial inoculant	In negotiation	Kenya	For profit	In negotiation	\$413,041	\$95,172
Information Technology and Data Collection									
World Cocoa Foundation	Hershey's, Orange, Grameen Foundation	Training for 5,400 cacao farmers.	Mobile extension platform	Grant Terminated	Cote d'Ivoire	Nonprofit	5/31/2013	\$77,561 ²	\$0
MercyCorps	Syngenta Foundation (Farmforce), Fair Fruit	Sales of Farmforce subscriptions to seven exporters, creating market access to US markets--in light of FSMA requirements.	Software as a service traceability and supply chain management system	In negotiation	Guatemala	Nonprofit	In negotiation	\$400,000	\$78,279
Climate Risk Mitigation									
Syngenta Foundation for Sustainable Agriculture (Kilimo Salama)	IRI Columbia, Access to Finance Rwanda, IFC	Sales of index insurance plans to 51,500 new farmers and feasibility assessed for new country expansion in Malawi and Zambia.	Weather Index-Based Crop Insurance	In negotiation	Rwanda, Tanzania, Malawi, Zambia	Nonprofit	In negotiation	\$1,000,000	\$1,500,000

² Original budget was for \$387,806 with a leverage of \$418,886.

ANNEX III: SUPPLEMENTAL DOCUMENTS

Available on [Feed the Future Partnering for Innovation Intranet](#)³:

- [Grant Agreements \(SMOGs\)](#)
- [Mission Marketing Materials](#)
- [Monthly Updates](#)
- [Country Reports](#)

³ <http://fintrac.com/ftf-pi/>: password required.