SEPTEMBER 30, 2017

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Executive Summary

Feed the Future Partnering for Innovation is a United States Agency for International Development (USAID)-funded program that helps commercialize US and other agricultural innovations in smallholder markets by supporting public private partnerships that improve food security.

The program helps the private sector to scale and market agricultural innovations for smallholder farmers through competitive awards and knowledge exchange, facilitates partnerships between USAID Missions and the private sector, and provides business acceleration tools and services that increase businesses’ impact on smallholder farmers.

The Numbers:

1,140,000  
Farmers cultivating 292,676 hectares of land have benefited from partnerships to date

45  
Partners have worked with 55 sub-partners in 17 countries through September 2017

94  
Technologies have been commercialized, with $17.5 million in sales of technologies by partners to date

$65,832,839  
In leverage has been spent by partners to date, in addition to $25,809,400 invested by Partnering for Innovation
The Story

FY17 was an exciting year at USAID-funded Feed the Future Partnering for Innovation, as final partnerships were signed, several partnerships ended, and the final push to develop learning products for the end of the project accelerated. The program’s final partnerships began in the spring, with seven new partners signed and three existing partners expanding their activities. Fourteen partnerships ended, each generating important lessons learned about commercializing products in smallholder markets and about how donors can partner directly with the private sector.

Partnering for Innovation has already reached more than 1.1 million smallholder farmers with innovative agricultural technologies, products, and services. This is thanks to the success of companies like Musoni, which disbursed nearly 14,000 Kilimo Booster loans during its partnership, and EthioChicken, which sold 3.2 million day-old chicks through its network of 1,500 sales agents in Ethiopia. In Mozambique, partners have far surpassed their original targets, having reached 110,000 farmers – with three partnerships still ongoing – compared to the original target of 70,000. EMCL alone bought $66 million worth of commodity from smallholder farmers over the course of its partnership and 60,000 farmers sold commodities and bought inputs and mechanization services from EMCL. In Bangladesh, The Metal surpassed its partnership targets, providing tractor rental services to more than 4,000 farmers through 96 local service providers.

Ongoing partners also continue to make great strides. TECAP has reached nearly 16,000 farmers and generated more than $800,000 in input and equipment sales since operationalizing three farmer houses in Nampula, Tete, and Zambezia, Mozambique. Twiga Foods now sells to nearly 1,000 urban produce vendors per day in Nairobi, Kenya and anticipates better-than-expected growth both in vendors and smallholder farmer participants with the introduction of new crops and growing demand in Nairobi for fresh produce.

In addition to investing in these partners, Partnering for Innovation helps them further scale impact and strengthen sustainability by providing acceleration services. In February, the program held a Metrics to Marketing workshop in Mozambique, where companies learned about collecting and using farmer data to better inform marketing and business decisions. In June, the AgBio Lab in Guatemala was held to connect market and technology experts with companies targeting sales of biological products in Central America.

Tech Talks with Agro-Input Suppliers Limited and Tolaro Global gave these two companies exposure to potential funders and partners. Two Tech Talks on metrics for marketing and one on the global market for biological products helped businesses expand their technology and marketing networks. Partnering for Innovation also hosted two ‘brown bag’ discussions at USAID, and used the new Learn blog on the AgTechXChange to share information on key steps to commercializing agricultural products in smallholder markets, knowing your market, and applying for funding. Partnering for Innovation wrote a report on how products developed in research institutions can be successfully commercialized, and collaborated on a report about targeting women customers in smallholder markets. Through two new communications channels, an Instagram account and a series of illustrated stories about individual farmers and entrepreneurs on the program website, Partnering for Innovation is providing an up close and personal look at the work that its partners are doing around the world.

Investing in private sector agricultural companies is an effective, efficient, and sustainable way to improve food security and livelihoods for smallholder farmers. By providing the initial investment and know-how needed for companies to enter and scale in smallholder markets, Partnering for Innovation’s impact will continue to grow long after the program is over.
I. Technology Commercialization

The technology commercialization component of Partnering for Innovation focuses on identifying and commercializing agricultural technologies in smallholder markets by investing in off-the-shelf technology scale-up or new market entry.

### Highlights

- **Twiga Foods** now transacts with nearly 1,000 urban produce vendors per day in Nairobi, and anticipates better-than-expected growth both in vendors and smallholder farmers with the introduction of the new crops and the realization of more untapped demand in Nairobi for fresh produce than anticipated.

- In collaboration with Grameen Foundation in Kenya, Musoni was extremely successful with its Kilimo Booster loan product, disbursing 13,948 loans valued at $5,265,555 during its partnership and 16,826 loans valued at $6,425,457 to date. Musoni focused its robust marketing efforts on reaching women farmers, with the result that twice as many women as men have received Kilimo Booster loans.

- **EthioChicken** has successfully scaled the commercialization of improved poultry in Ethiopia, selling 3.2 million day-old chicks through a network of 1,500 rural sales agents. Partnering for Innovation’s partnership with EthioChicken was one of five finalists at this year’s prestigious P3 Impact Award.

- The Metal, in Bangladesh, was one of the few investments that targeted mechanization, using a local service provider model. It exceeded all of its key targets and deliverables, which included selling 96 reapers to entrepreneurs; in turn, 4,060 smallholder farmers purchased a total of $45,000 of reaping services from these entrepreneurs.

### Active partnerships | Completed partnerships | Current countries | Program funding to date | Partner leverage spent to date
---|---|---|---|---
11 | 13 | 7 | $8.9 million | $9.9 million
I really must say that setting this up as a milestone-based contract worked very well for both the project activities and project administration. It made planning and execution that much easier, and because the means of verification were agreed upon at the very beginning, we had absolutely no issues around meeting expectations. Thank you so much for your support and for making this very manageable. A project manager’s dream!

Brigitta Nyawira, Grameen Foundation, Kenya

Partnering for Innovation guided us well through the process and you understood the problems that faced us. We definitely had a good experience so we would definitely work with USAID again.

Bashir Sama, Rab Processors, Malawi
Feed the Future Partnering for Innovation is a United States Agency for International Development (USAID)-funded program that helps commercialize US and other agricultural innovations in smallholder markets by supporting public private partnerships to improve food security.

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African Agricultural Technology Foundation (AATF)

Kenya, Tanzania, and Uganda
January 2014 – January 2018
Investment total: $4,039,674 (program: $3,063,390; partner leverage: $976,284)

Target: Nearly 120,000 farmers will purchase 955 MT of StrigAway maize seed. To date, 47,615 farmers have purchased 381 MT of StrigAway.

Background

In Kenya, Tanzania, and Uganda, striga, a parasitic weed, infests 1.4 million hectares of farmland resulting in up to a 100 percent loss of maize crops. StrigAway is an herbicide-resistant maize seed developed by the International Maize and Wheat Improvement Center (CIMMYT) that is coated in imazapyr, an herbicide that restricts the growth of striga, leading to a healthier and more productive maize plant. It is the first such seed to be commercially available to smallholder farmers in East Africa. AATF is working with CIMMYT and seven local seed companies – Kenya Seed, Freshco, Elgon, Tanseed, Meru Agro, NASECO, and Victoria Seeds – to increase StrigAway production and distribution by providing training and technical assistance, funding for establishing a network of demonstration sites, automated seed treatment equipment to safely apply the herbicide, improved packaging and labeling, and safe pesticide use training.

FY17 Progress

AATF made good progress with imazapyr-resistant maize seed production in Kenya and Uganda. In Uganda, NASECO continued to perform the best of all seed companies in the partnership. It produced 95 MT, the best yields of any seed company, and sold more than 55 MT. In Kenya, Freshco and Kenya Seed Company produced an estimated 250 MT at somewhat better yields and on bigger areas compared to last season. This reflects a commitment, especially on the part of Kenya Seed Company, to sustain StrigAway commercialization after the partnership ends. AATF held 50 postharvest loss trainings in Kenya, Tanzania, and Uganda for agrodealers in which it incorporated Partnering for Innovation-funded training videos. Three seed companies in Kenya established 62 IR-maize demonstration plots, and two seed companies planted 85 demonstration plots in Uganda. Finally, AATF convened a regional stakeholder meeting in Nairobi that brought together numerous seed companies to discuss challenges and opportunities in reaching smallholder farmers in eastern and southern African markets.

This partnership faced a number of production challenges in the past year. Poor and unpredictable rains affected yields throughout East Africa. Communal conflict from elections jeopardized Kenya Seed Company’s production, as neither it nor AATF could visit seed production areas. The fall army worm also impacted yields.

In May 2017, Partnering for Innovation modified AATF’s agreement to remove all outstanding production and sales milestones in Tanzania, as non-performance by Tanseed and Victoria Seed made it virtually impossible to meet the associated milestones. The modification will allow AATF to focus on the seed companies in Kenya and Uganda. In FY18, 400 MT of seed are expected to be sold to 50,000 farmers.
Agro-Input Suppliers Limited

Malawi
November 25, 2015 – November 2017
Investment total: $485,680 (program: $273,157; partner leverage: $212,253)

Target: Agro-Input Suppliers Limited (AISL) will sell 500,000 packets of Nitrofix to approximately 80,000 smallholder farmers to increase soybean yields by 50 percent.

Background

Soil in Malawi is depleted of essential nutrients, particularly nitrogen, which are needed to intensify production. Approximately two-thirds of Malawi’s agricultural farmland suffers from severe soil degradation affecting crop yields and sustainable agriculture.

Through this partnership, AISL is working with the Malawi Department of Agriculture Research and the International Institute of Tropical Agriculture to commercialize Nitrofix, a legume inoculant that contains rhizobia that boost legumes’ natural nitrogen fixation. The inoculant was specifically developed for legumes grown in Malawi. Using the product helps these crops better harness atmospheric nitrogen by accelerating the growth of nitrogen fixation, which boosts plant yields and improves overall soil fertility. By using Nitrofix, a less costly alternative to nitrogen fertilizers, farmers also save money on this important input.

To increase product availability and ensure proper use, AISL will sell Nitrofix through 25 agrodealers, set up 116 demonstration plots, and organize 50 farmer field days to show the difference between soybeans planted with and without Nitrofix.

FY17 Progress

Using an integrated agrodealer distribution and marketing strategy, AISL sold 158,914 50-gram sachets of Nitrofix to 25,426 farmers. The value of these sales was $160,699. AISL expects to sell an additional 350,000 sachets of Nitrofix this season, and has introduced inoculants for groundnuts and common beans to the market. In addition to expanding its product line, AISL also held 50 field days to demonstrate to farmers the effectiveness of Nitrofix to increase soy and groundnut yields, and also finalized the construction of its laboratory which will allow it to increase Nitrofix production from 500,000 to one million sachets as well as produce complementary products (Aflasafe, etc.). A partnership with the Feed the Future Malawi Ag Diversification Activity has allowed AISL to expand distribution and sales, reaching farmers in the Feed the Future focus areas.

AISL continues to be challenged by government and donor programs that offer farmers free inputs. Through continued marketing through demo days and having a reliable supply of Nitrofix available in shops, sales of Nitrofix are beginning to scale. In addition to pursuing regional sales opportunities in Mozambique and Zambia, AISL is also planning to establish warehouses co-located with AISL hub shops to provide an output market for farmers as part of its medium-term business plan.

55,000 more smallholders are expected to purchase Nitrofix in FY18.
Flow Equity (EthioChicken)

Ethiopia
March 2015 – December 2016 (completed)
Investment total: $4,517,867 (program: $396,518; partner leverage: $4,121,349)

Impact: EthioChicken sold 3.2 million day-old chicks to 345,000 smallholder farmers comprised of 80 percent women. In addition, it sold 3,073 MT of poultry feed.

Background

Despite a tradition of poultry raising by rural populations in Ethiopia, many regions have a poultry shortage. Low productivity and high costs contribute to low levels of consumption, particularly in rural areas. Although poultry is the second most important meat product in these regions, chicken consumption in rural communities is only one third the urban rate, and the majority of smallholders in the Tigray and Amhara regions do not have access to improved chickens.

Prior to the partnership with Partnering for Innovation, the USAID Development Credit Authority helped EthioChicken unlock bank financing to provide working capital for the business. USAID funding through Partnering for Innovation then enabled EthioChicken to introduce improved chicken breeds to Ethiopia by scaling its hatchery operations and expanding its network of sales agents to reach more farmers located in rural areas, and improve feed production and distribution. The poultry breeds that EthioChicken is introducing into Ethiopia grow 150 percent larger in the first three months and produce four times as many eggs as local breeds. The company’s agents raise chicks for the first 40 days and receive a commission for each sale thereafter.

Partnership Achievements

By the end of this partnership in December 2016 EthioChicken had sold 3.2 million day-old chicks. In the first nine months of 2017 EthioChicken reported country-wide sales of 5.7 million additional day-old chicks and 8,100 MT of feed, with approximately 50 percent of the sales in the targeted regions of Oromia and Tigray. Since Partnering for Innovation does not have data on the number of new versus repeat buyers, we have not updated farmer numbers for these sales. EthioChicken parent company Flow Equity continues its expansion into Rwanda at the Rubirizi National Hatchery. This foray outside of Ethiopia represents the first of other planned new country expansions in Africa with its unique smallholder farmer-focused business model to revolutionize poultry and egg production on the continent.
Grameen Foundation with Musoni

Kenya
February 2016 – June 2017 (completed)
Investment total: $641,106 (program: $389,943; partner leverage: $251,163)

Impact: Musoni, with support from Grameen Foundation, disbursed 13,948 loans valued at $5,265,555.

Background

Although Kenya has a highly developed microfinance sector, smallholder farmers struggle to access loans that are tailored for their unique collateral and cash flow requirements. With Partnering for Innovation’s support, the Grameen Foundation is partnering with local microfinance institution Musoni to develop Kilimo Booster, a loan tailored specifically for smallholder farmers, with flexible terms and a customizable grace period based on the farmer’s seasonal cash flow. Grameen Foundation is developing a loan application software that will streamline the loan process through shortened approval and disbursement turnaround time, supporting the sustainable growth of Musoni’s Kilimo Booster product for smallholder farmers, and increasing Musoni’s profitability by allowing it to access a larger market share of smallholder borrowers.

Partnership Achievements

The tablet-based software developed in collaboration with Grameen Foundation enabled Musoni to be extremely successful with its Kilimo Booster loan product, disbursing 13,948 loans valued at $5,265,555 throughout the partnership and 16,826 loans valued at $6,425,457 to date. Musoni has also focused its marketing efforts on reaching women farmers with the result that twice as many women as men have received Kilimo Booster loans. Starting in December 2016, Grameen Foundation helped Musoni launch a tablet-based cash flow analysis software for Musoni’s wealth creation officers to use in real time in the field. This analysis software allows wealth creation officers to determine on the spot a client’s cash flow and, as a result, customize the loan grace period and repayment terms for individual loans. The associated decrease in time needed to complete and process each loan application means that the Kilimo Booster loan is more profitable for Musoni to place, and the customized loan terms lead to a reduction in smallholder farmer default. As the Kilimo Booster loan product increases in profitability for Musoni, the company is looking into how to expand its activities in other regions of Kenya.
MEA manufactures and sells BIOFIX, a rhizobium inoculant for legumes that increases yields by up to 40 percent. Developed for specific legume varieties and for use in Kenya’s soils, BIOFIX enhances legumes’ natural nitrogen fixation and thereby eliminates the need for nitrogen fertilizers, which many farmers cannot afford. This natural, affordable product is unique in the East African market and has the potential to double crop yields for Kenya’s 30 million smallholder bean farmers.

To meet high demand among Kenyan farmers, MEA, with support from Partnering for Innovation, is increasing the amount of BIOFIX on the market by 50 percent. To do so, MEA is expanding its factory by introducing a bulk mixing production process. The upgrades increase total production of BIOFIX and reduce production time from 21 to seven days. Funding for MEA also pays for demonstration plots, farmer training, and aftersales support.

In FY17, MEA addressed a significant management shortfall following the resignation of the previous BIOFIX manager by hiring a senior staff soil scientist to take over the role of manager of this activity. The new BIOFIX manager oversaw the establishment of 22 demonstration sites after renewing MEA’s relationship with subcontractor WeRATE, which manages the plots. The manager will conduct field visits several times per month to agrodealers, farmer groups, and one-stop shops under the N2Africa project to revive distribution linkages between MEA’s BIOFIX factory in Nakuru and suppliers to farmers in western Kenya. A farmer impact survey completed by Partnering for Innovation revealed that distribution shortfalls, not the quality of the product or its price, is one of the key challenges to BIOFIX’s commercial sustainability.

Upgrades funded by Partnering for Innovation to improve BIOFIX production at MEA’s Nakuru factory resulted in reduced production times from 21 days to seven days. In part because of those upgrades, from 2015 to 2016 MEA increased BIOFIX sales by approximately 50 percent. MEA will soon launch a liquid formulation of BIOFIX, made possible by the production upgrades, which farmers can more easily apply to legume seeds than the current powdered formulation. With the most sophisticated factory of its type in the region and few competing legume inoculants on the market, MEA will look to expand BIOFIX’s reach both within and outside of Kenya. In FY18, MEA expects more than 50,000 smallholder farmers to purchase BIOFIX.

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**FY17 Progress**

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The Metal

Bangladesh
January 2016 – June 2017 (completed)
Investment total: $597,373 (program: $399,953; partner leverage: $197,420)

Impact: The Metal established six farm machinery hubs, hired 32 staff, trained 700 local service providers, and sold 96 reapers valued at almost $200,000 to entrepreneurs. The newly-trained local service providers provided reaping services to more than 4,060 farmers, earning $45,000 in income.

Background

The Metal, a leading agro equipment distributor in Bangladesh, is establishing farm machinery hubs to market, sell, and provide after-sales services for its small-scale reaper and other machinery. The reaper, which is being commercialized through this partnership, can be operated by one individual with the capacity to reap one acre of rice or wheat in just over an hour and costing $12-$15 per acre, compared with eight hours and $23 using manual labor. The Metal reaper allows for quicker harvesting resulting in more time for other postharvest activities as well as land preparation for the next crop. Most importantly, using a reaper to harvest rice and wheat reduces labor costs by 90 percent and on-farm crop losses by 10 percent. Despite these savings, less than one percent of crops are reaped mechanically in Bangladesh. Although the reapers are too expensive for individual smallholder farmers to purchase, the small size and large concentration of smallholder land provides a lucrative business opportunity for local entrepreneurs to offer reaping services. Through this partnership, the Metal is therefore marketing reapers to local service providers who offer reaper services to smallholder farmers for a fee. The Metal also manages the post-sales maintenance of the reapers.

Partnership Achievements

Because of a strong management team that understood both long-term and short-term business goals, activities, and milestones, The Metal was able to complete its 18-month partnership without requiring a modification. Through this partnership, The Metal launched a comprehensive marketing, promotion, and public awareness campaign utilizing numerous media outlets such as billboards, wall paintings, newspapers, and industry trade magazines. It also showcased the reaper technology at market days, demonstration plots, and even through a docudrama. Coupled with the establishment of repair and spare parts outlets and well-trained staff, it established a strong brand awareness among farmers and entrepreneurs. The Metal exceeded all of its key targets and deliverables, which included selling 96 reapers to entrepreneurs; in turn, 4,060 smallholder farmers purchased a total of $45,000 of reaping services from these entrepreneurs. Despite The Metal's extensive media campaign, most rice and wheat farmers in Bangladesh are still unaware that mechanized reaping is more time- and cost-effective than traditional manual harvesting. The Metal must continue to raise public awareness of reaper technology among smallholder farmers while also promoting the commercial opportunities for local mechanization service providers in rural communities. Access to financing for local service providers will also be critical to The Metal's ability to scale up. The Metal must continue to demonstrate to financial institutions that local service providers can earn enough income providing reaping services to support and service the loan. The Metal has started to do this by developing, through this partnership, proof of concept that this model works and gathering lessons and data that show the sustainability of the business model, helping local service providers become more attractive loan recipients.
Promethean Power Systems

Bangladesh
March 2017 – August 2018
Investment total: $933,255 (program: $692,000; partner leverage: $241,255)

**Target:** Promethean will provide 3,000 smallholder farmers with commercial access to the dairy cold chain, dramatically reducing spoilage and improving quality, increasing farmers’ income and the incentive to increase production.

**Background**

India and United States-based Promethean Power Systems is introducing and selling milk chillers to dairy processors in Bangladesh that source from smallholder farmers. Promethean has developed an off-grid cold storage solution that can be used by dairy processing companies in villages with inconsistent electricity and where individual farmers rely on small collection centers that consolidate small quantities of milk for processing by the dairy industry. The lack of a cold chain at the village level severely limits the number of smallholder dairy farmers who can participate in the formal market, as milk from these farmers usually goes unrefrigerated until it reaches a regional collection center, by which time its quality has suffered significantly. To expand its business into Bangladesh, Promethean is partnering with Partnering for Innovation to establish a local management and technical team, identify and develop business relationships with key dairy processors, conduct equipment demonstrations and monitor the effectiveness of the milk chillers, and launch an outreach campaign explaining the benefits of cool storage for dairy.

**FY17 Progress**

Despite delays that resulted in two extended milestones, Promethean has successfully installed milk chilling units on 10 demonstration locations in partnership with Bangladeshi dairy processors Milk Vita, Brac, and Pran. This was initially delayed eight weeks, from early June to late July, because of difficulties in obtaining the letter of credit required to import equipment into Bangladesh. Also because of these delays, the operator training has been pushed back but is now on track to be completed in late 2017.

Promethean has also developed a marketing plan, hired local staff, and has begun to manufacture some parts of the milk chillers in-house, reducing the product’s cost of production which should make it more accessible to other dairy companies in Bangladesh.
Stewards Globe

Zambia
April 2016 – April 2018
Investment total: $893,746 (program: $391,098; partner leverage: $502,648)

**Target:** Stewards Globe will work with 220 seed outgrowers, the majority women, to promote new legume and sunflower varieties. This will provide 60,000 smallholder farmers access to improved seed through sales of 600 MT of soy, sunflower, cow pea, groundnut, and common bean varieties.

**Background**

In Zambia, the seed market is dominated by companies producing maize and soy seed, leaving demand for improved legume and sunflower seed unmet. Through this partnership, Stewards Globe, the largest supplier of legume and sunflower seeds in Zambia and a woman-owned company, is increasing production of its certified seed varieties, which include groundnut, soybean, common bean, sunflower, and cow pea, in order to increase its capacity to meet demand. Stewards Globe is using an outgrower scheme to increase certified seed production and is increasing awareness of its brand through demonstration plots, field days, and promotional materials.

**FY17 Progress**

This year, Stewards Globe produced and sold 300 MT of certified legume seed and initiated a robust product marketing campaign by establishing 123 demonstration plots, training agrodealers, and initiating a radio advertising campaign. Additionally, Stewards Globe expanded its seed outgrower network from 220 farmers to 900 and established a pilot group of 21 farmers using drip irrigation to demonstrate the value of using this technology to mitigate the impact of drought and to expand the seed growing season.

Currently Stewards Globe is facing a large marketing and distribution challenge because of the government’s transition from the Farmer Input Support Program to an e-voucher system. In the past, Stewards Globe relied on bulk sales of seed to the Zambian government, which then distributed those seeds to smallholder farmers in need. With the e-voucher system, farmers will instead be given vouchers to purchase seed and other inputs directly from local agrodealers. This means that Stewards Globe will expand its distribution channel to get its seed out to as many agrodealers as possible in order to maintain its market share. Additionally, the company will need to refine its marketing strategy to target both agrodealers and farmers. To help address this challenge, Partnering for Innovation identified a marketing consultant who will assist Stewards Globe in collecting data on these market segments and develop a more targeted marketing campaign.

Even though Stewards Globe met its projected impact targets ahead of schedule in FY17, in FY18 the company will continue to scale up sales and distribution networks, resulting in the sale of at least 300 MT of improved seed varieties to smallholder farmers in Zambia.
Store It Cold

Honduras and Guatemala
January 2016 – January 2018
Investment total: $1,201,150 (program: $918,191; partner leverage: $282,959)

Target: Store It Cold will sell the CoolBot to exporters, cooperatives, and associations that source from smallholder farmers, impacting between 4,000 and 9,000 smallholder farmers.

Background

Traditional cold storage rooms are too expensive for aggregators who source from smallholders and as a result most aggregation is not cooled at the collection point. Store It Cold is commercializing the CoolBot, an effective and low-cost product that provides an alternative to traditional cold stores in Honduras. The CoolBot, an inexpensive device that lowers and regulates the temperature of an insulated room by connecting to a standard window air conditioning unit, makes access to inexpensive cold storage a possibility closer to horticulture production areas. Cooling close to the field extends shelf life, improves quality, and reduced rejection rates of perishable food products. The CoolBot was invented by a farmer in upstate New York and originally used by small-scale farmers in the United States. Now, US-based Store It Cold is partnering with Partnering for Innovation to commercialize the CoolBot in Honduras and Guatemala, where a typical refrigeration unit can cost as much as $8,500 — too expensive for small cooperatives and association consolidators that buy directly from smallholder farmers. In addition to being less expensive to purchase, the CoolBot reduces installation costs by 80 percent and operational costs (primarily electricity) by 40 percent, enabling small local consolidators to improve the handling and transport of fresh products along the value chain.

FY17 Progress

In FY17, Store It Cold expanded its sales team in Honduras and solidified relationships with contractors to build cold rooms for customers as a bundled package, which will increase its overall margins. To drum up interest in the CoolBot, Store It Cold held two launch events at demonstration sites and 24 demonstrations with its mobile cold storage unit, which reached nearly 1,000 potential customers in Honduras and Guatemala who work in agricultural sectors including beef and dairy, aquaculture, floriculture, and traditional farmer cooperatives. Store It Cold’s marketing initiatives resulted in 40 CoolBot sales to date in Honduras, including to two seed banks, SENASA and DICTA, which estimated the seeds they store and sell will supply more than 40,000 smallholder farmers, with an additional 2,569 farmers benefitting from the 40 CoolBot sales.

Based on its success in Honduras, in March 2017 Partnering for Innovation modified Store It Cold’s agreement to launch the company in Guatemala. Store It Cold signed a distribution agreement with a Guatemalan company, Industrias Servin, to handle its sales of cold store rooms and refrigerated trucks, in contrast to Honduras where the company does direct sales of CoolBots. These contrasting business models will provide Store It Cold with a wealth of information and experience to inform future expansions into other countries in the region. The company imported 30 CoolBots into Guatemala, developed comprehensive price lists, and launched an informational campaign to raise awareness of the technology in Guatemala. In FY18, Store It Cold will continue to scale up regional sales in Guatemala and Honduras, selling at least another 55 CoolBots and cold storage solutions; these sales have the potential to impact more than 6,000 new smallholder farmers.
Twiga Foods

Kenya
March 2017 – August 2018
Investment total: $1,397,232 (program: $689,432; partner leverage: $707,800)

Target: Twiga will increase the number of smallholder farmers from whom it sources fresh produce by 7,500.

Background

Twiga Foods is a Kenyan company that uses a mobile business-to-business (B2B) platform to connect smallholder farmers to informal urban produce markets and enhance the supply chains that link them. Through this partnership, Twiga is expanding its network of rural collection centers, where it aggregates produce from smallholder farmers, from the existing eight to 33, benefitting 7,500 new smallholder farmers. By expanding its network, Twiga is providing a reliable market for more farmers, and by removing multiple levels of middlemen, is providing urban shopkeepers and other vendors with a reliable supply of quality, affordable produce to sell. Twiga’s innovative B2B platform generates rich data that will further improve its processes. Its warehouse in Nairobi will collect fresh produce from the centers, and using the B2B platform, sort, package and make daily deliveries to over 1,800 urban shopkeepers and streetside vendors. Twiga hopes to ultimately replicate its model in other African cities that all depend on fragmented supply chains for farm-to-market fresh produce distribution.

FY17 Progress

Twiga Foods continued to rapidly scale up its B2B model. The company introduced new crops to its lineup of available products, including mangoes, carrots, and cabbage, as well as testing more exotic crops like passion fruit through trial runs of multi-crop shipments from the field to Nairobi. Twiga now transacts with nearly 1,000 vendors per day in Nairobi, and anticipates better-than-expected growth both in vendors and smallholder farmers with the introduction of the new crops and the realization of more untapped demand in Nairobi than anticipated. Additionally, Twiga closed a Series A funding deal for $10.3 million with Wamda Capital, which will help solidify its business and demonstrates investor confidence in the potential of the business model.

Twiga faced challenges in constructing its first ten collection centers because of the August 2017 presidential elections in Kenya. The elections saw protests, delayed approvals at government offices, and a paucity of construction workers, who opted to join campaigns. The annulment of the first presidential election further affected construction, as many business activities remained stalled, government offices did not return to full operations, and protests continued. Twiga expects that these centers will be completed by the end of October.
Zamorano University

Honduras
April 2015 – January 2017 (completed)
Investment total: $652,198 (program: $393,932; partner leverage: $258,266)

Impact: Zamorano University produced and sold 10,400 doses of its beneficial nematode product, NemaPower, and scaled its production from 600 doses per year to 12,000.

Background

Zamorano University is producing beneficial nematodes to control insect infestations in select horticultural crops. Known as NemaPower, this biological pest control product costs less than chemical pesticides and reduces infestations by as much as 98 percent in six months. Demand for effective biological pest control solutions like NemaPower has been increasing rapidly in Central America, especially from smallholder coffee producers. Through the Partnering for Innovation-supported scale-up of its biocontrol laboratory, Zamorano will reduce production time from 55 to 12 days, increasing the annual supply of NemaPower by a factor of 20 or more above current levels. Zamorano will also identify a commercial distributor in order to market the product in Honduras and later in other Central American countries such as Guatemala, El Salvador, and Nicaragua.

Partnership Achievements

By the end of the partnership in June 2017, Zamorano had successfully remodeled its laboratory, reducing production time for NemaPower from 55 to 12 days and scaling up its production by a factor of 20, from 600 to 12,000 doses of NemaPower produced annually. Zamorano sold more than 9,551 doses through its relationship with four commercial distributors and with small producers.

Zamorano learned that understanding and supporting both smallholders and distributors was key to selling this product. Initially, Zamorano was challenged by the need to build demand for biological pest control products in a market dominated by chemical pesticides. To address this challenge, Zamorano created a multi-step training program for farmers and leveraged relationships with local cooperatives and companies that could act as distributors. By using technicians to develop strong relationships with farmers, Zamorano was able to collect feedback and improve its training and distribution. Zamorano also experienced difficulty developing a sustainable distribution network. Several distributors, especially those who also sell chemical pesticides, would buy NemaPower but not sell it on to farmers as they did not see biologicals as an important or profitable part of their business. While this is an ongoing challenge, Zamorano has taken steps to demonstrate the value of NemaPower and to form new relationships, including with Walmart. Zamorano partnered with Walmart to train Walmart’s technicians in using NemaPower. Now, Walmart orders pest control products from Zamorano’s distributors and trains its outgrowers. Zamorano sees this partnership, among others, as key to its growth strategy.
Spotlight: The Power of Video

Several partners are harnessing the power of video for training, extension, and marketing. Videos are engaging, modern, and help people with low literacy access information more effectively than through manuals and pamphlets.

The African Agricultural Technology Foundation (AATF) is using videos to train agrodealers on how to use StrigAway, an herbicide-resistant maize seed that suppresses the growth of the parasitic weed striga. A farmer impact survey conducted last year showed that a key strategy to increasing farmer uptake of the technology was to train the agrodealers who sell it so that they could more effectively answer farmer questions about its benefits and proper usage. This training was then incorporated into a milestone and Rana Labs developed the video series. Click here to view the videos.

Rana Labs, as part of the AgriJoven partnership with Mercy Corps, is training youth in Guatemala to make videos using basic video technology as an agricultural extension tool in their communities. So far, Rana Labs has trained nearly 100 youth in video production, and youth have made videos on topics such as irrigation, coffee rust, and the importance of using certified potato seeds. Watch some of the extension videos here.

The Metal produced a video that promotes its newly-commercialized reaper by showing that using a reaper will also bring success to your love life! The Metal's half-hour docudrama follows a young man trying to get the girl, and only succeeding when he becomes an entrepreneur with The Metal. The Metal is showing the video on its promotional buses and in its stores.

The Metal also produced a video that provides a summary of its partnership with Partnering for Innovation. This video can be viewed here!
2. Mission Partnerships

Partnering for Innovation provides USAID Missions with a more efficient way to engage the private sector by identifying and managing public-private partnerships that support Mission agriculture and food security goals.

<table>
<thead>
<tr>
<th>Active partnerships</th>
<th>Completed partnerships</th>
<th>Current countries</th>
<th>Program funding to date</th>
<th>Partner leverage spent to date</th>
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<td>17</td>
<td>10</td>
<td>8</td>
<td>$25 million</td>
<td>$56 million</td>
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Select Highlights

- Popoyán opened its new laboratory for producing biological control products. This facility is one of the most modern biocontrol production laboratories in Latin America and the largest in Guatemala.

- The Mozambique partners have far surpassed their original farmer targets, having impacted 110,000 farmers with improved technology and services – with three partnerships still ongoing – versus the original target of 70,000.

- Through its new storage, input, and mechanization hubs in Mozambique, Export Marketing Group Limited (EMCL) bought $66 million worth of commodity from smallholder farmers over the 30-month partnership with Partnering for Innovation. 60,000 farmers sold commodities and purchased inputs and mechanization from EMCL.

- The partnership with Agrico resulted in the company more than tripling its storage space and increasing its revenues by 50 percent. Agrico is now expanding into a new business line of buying and aggregating potatoes from its small- and medium-scale farmers for sale to Ukraine’s large retail market for the first time.
Benin

Benin’s strategy for developing its agriculture sector focuses on promoting entrepreneurship; strengthening value-added activities; obtaining investment that will establish the infrastructure needed for a competitive agriculture sector; and diversifying agricultural products. With a focus on smallholder farmers, particularly women, USAID supports partnerships in developing Benin’s agriculture sector to spur economic growth that increases productivity, employment, and incomes while reducing hunger, poverty, and malnutrition. USAID/Benin and Feed the Future Partnering for Innovation’s goal is to work with for-profit private sector partners to promote agricultural development by leveraging the expertise of commercial partnerships to benefit smallholder farmers in productive and profitable ways.

Feed the Future Partnering for Innovation is a United States Agency for International Development (USAID)-funded program that helps commercialize US and other agricultural innovations in smallholder markets by supporting public-private partnerships that improve food security.

The program helps the private sector to scale and market agricultural innovations for smallholder farmers through competitive awards and knowledge exchange, facilitates partnerships between USAID Missions and the private sector, and provides business acceleration tools and services that increase businesses’ impact on smallholder farmers.

Through September 2017, 1,563 farmers have been trained through the partnership in Benin.
Tolaro Global

Benin
May 2016 – May 2018
Investment total: $1,610,034 (program: $772,514; partner leverage: $837,520)

**Target:** Tolaro will source raw cashews from 3,200 smallholder farmers and provide agronomic training to these farmers; assist them to become organic certified; pay Fair Trade certified prices for raw nuts; and provide them with equity ownership in Tolaro by issuing shares in their new processing company.

**Background**

More than 40 percent of the world’s cashew nuts are grown in West Africa but more than 90 percent of the crop is exported without any value addition such as shelling, roasting, seasoning, and packaging. Benin’s exporters and smallholder growers are missing out on significant value added income that would result from in-country processing. Through this partnership, Tolaro is establishing an organic and Fair Trade certified cashew roasting, seasoning, and packaging plant to sell retail quality cashews to international markets.

In creating an equity ownership model, Tolaro is setting itself apart from other cashew buyers in Benin and offering a unique opportunity to smallholder farmers. By making smallholders into stakeholders, Tolaro is not only providing additional benefit to farmers, it is also creating loyalty to Tolaro among these farmers. Furthermore, the stakeholder model is designed to ensure an equitable partnership with a smallholder farmer base and if successful, could serve as an example for other companies engaging smallholder farmers.

**FY17 Progress**

In early 2017, Tolaro Global received Fair Trade certification for its cashews, allowing it to charge a price premium when selling in US and European markets. A portion of this price premium, approximately 12 percent, is passed through to the smallholder farmers Tolaro sources from in accordance with the Fair Trade certification. By late July, Tolaro had purchased cashews at a premium price from more than 1,500 smallholder farmers. These farmers have also been trained by Tolaro on good agricultural practices, harvesting, and storage, resulting in higher yields and better quality cashews.

In the second half of 2017, Tolaro focused its efforts on completing the new roasting and seasoning facility. The construction and installation of equipment has experienced a number of setbacks resulting from delays in permitting, building, and the shipment of equipment. As a result, the completion date has been revised twice and is now scheduled for late January 2018. The facility delays will also have an impact on Tolaro’s marketing launch and sale of its new products. In order to ensure production can run efficiently as soon as the facility is completed, Tolaro will redeploy its more experienced employees from the primary processing facility to manage the roasting and seasoning facility.

An additional 1,700 smallholders will sell raw cashews to the company in FY18.
Guatemala

Guatemala has tremendous potential for expanding its agricultural production as a major exporter to the US and European Union of non-traditional crops such as snow peas, green beans, and baby vegetables. Yet food insecurity and malnutrition levels remain high, as many smallholder farmers lack access to improved technologies and technical assistance, as well as market access, that would improve their productivity and incomes. In addition, the lack of economic opportunities has led to high levels of youth migration out of the country. Feed the Future Partnering for Innovation is working with USAID/Guatemala to engage private sector partners that can expand commercial access to transformational agricultural inputs and technologies for smallholder farmers and generate sustainable, long-term employment opportunities for youth in agriculture.

Feed the Future Partnering for Innovation is a United States Agency for International Development (USAID)-funded program that helps commercialize US and other agricultural innovations in smallholder markets by supporting public private partnerships that improve food security.

The program helps the private sector to scale and market agricultural innovations for smallholder farmers through competitive awards and knowledge exchange, facilitates partnerships between USAID Missions and the private sector, and provides business acceleration tools and services that increase businesses’ impact on smallholder farmers.

Through September 2017, 4,309 farmers have accessed new technologies through partnerships in Guatemala.
Mercy Corps with Fair-Fruit and Rana Labs

Guatemala
March 2016 – August 2018
Investment total: $1,939,108 (program: $1,366,963; partner leverage: $572,146)

Target: More than 1,000 youth will access credit through savings and loan groups. In addition to credit, youth will receive training in agricultural technologies that will boost productivity and empower them to be entrepreneurs in the Western Highlands of Guatemala.

Background

With limited education and employment opportunities at home, many youths in Guatemala seek to migrate to the US. Through this partnership, Mercy Corps is working with Guatemalan exporter Fair-Fruit to organize youth savings and loan groups in Guatemala’s Western Highlands. Lack of access to credit further constrains entrepreneurship and income generation potential among youth. Unlike other savings and loan groups, participating youth are also encouraged to purchase agricultural technologies and learn good agricultural practices to improve their farm productivity and income potential. In addition, Mercy Corps is engaging Rana Labs, a digital media agency, to train youth on the use of basic smartphone technologies to produce videos on good agricultural practices, which will serve both for extension training and also promote the benefits of youth savings and loan groups.

FY17 Progress

Mercy Corps’ AgriJoven activity has established 34 youth savings and loan groups, providing 586 young smallholder farmers with access to $15,606 in credit to purchase agricultural technologies to improve productivity on their farm. In collaboration with exporter Fair-Fruit, AgriJoven established 14 demonstration plots to showcase agricultural innovations, such as agricultural input supplier Popoyán’s biological control products. Fair-Fruit is now working directly with these groups, providing them with training, inputs, and market access by sourcing vegetables from them. In partnership with Rana Labs, AgriJoven successfully completed three video production trainings for 97 youth participants. As a result of these trainings, nine videos have been produced by the groups on topics including good agricultural practices, irrigation approaches, and integrated pest management.

This partnership is currently managing ongoing challenges with new group formation and creating additional market linkages with buyers. Field technicians are struggling to identify new youth who want to join. Field technicians also find it difficult to communicate the more intangible benefits of video production skills, good agricultural practices training, and market connections. Aside from Fair-Fruit, Mercy Corps is having difficulty linking new groups to other private offtakers.

An additional 435 youth are expected to join savings and loan groups in FY18.
Popoyán

Guatemala
June 2015 – July 2018
Investment total: $4,249,685 (program: $2,107,384; partner leverage: $2,142,301)

**Target:** Popoyán will train more than 3,000 smallholder farmers in integrated pest management, stimulating sales of $130,000 to smallholders of biological pest control products that reduce risk of production loss.

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**Background**

With key export markets requiring reductions in the use of agrochemicals, there is a growing demand for biological pest control products. In addition, demand for alternatives to traditional pesticides is growing since chemical pest products are becoming less effective, are damaging soil health, and are dangerous for humans if used incorrectly. To address the growing interest in biologicals, Popoyán, a leading agriculture input supplier in Guatemala, is scaling up production, marketing, and sales of beneficial insects and biological pest control products in Guatemala and regionally through the partnership with Partnering for Innovation.

**FY17 Progress**

In FY17, Popoyán received additional funding for a twelve-month expansion to include new crops, develop a marketing strategy, and double its sales and farmer training targets. Popoyán also doubled its lead farmer training goal, and already has 400 lead farmers in its network. At the same time, it has trained almost 4,500 farmers and established 224 demonstration plots that compare biological pest control products to synthetic chemicals on crops as diverse as snow and sugar snap peas, onions, potatoes, bell peppers, fava beans, French beans, garlic, Brussels sprouts, carrots, broccoli, coffee, and cardamom.

Popoyán also opened its new biologicals production facility, the Centro de Excelencia Micrbiano (CENEM), giving Popoyán the production capacity to produce and sell a wide variety of biological products to improve soil fertility and control pest infestations in the target crops. CENEM is one of the most modern biocontrol production laboratories in Latin America and the largest in Guatemala. IN FY18, Popoyán will continue to ramp up production and expand training and demonstration sites in order to meet sales milestones. 1,500 smallholders are expected to purchase biological control products from Popoyán in FY18.
Servicios de Post-Cosecha

Guatemala
May 2016 – August 2018
Investment total: $3,162,828 (program: $1,681,270; partner leverage: $1,481,558)

Target: Servicios de Post-Cosecha will improve access to quality potato seed to more than 1,400 producers, mostly youth, which will increase productivity and incomes.

Background

Guatemala is Central America’s largest producer of potatoes yet only five percent of farmers use certified seed, providing a market opportunity for Post-Cosecha to introduce new varieties sold under its Papais brand. Post-Cosecha, with funding from Partnering for Innovation and technical support from the International Potato Center (CIP), is establishing a laboratory, nursery, and greenhouse to produce certified seed in the Western Highlands. Additionally, Post-Cosecha and local partners Dayco and Asociación de Organizaciones de los Cuchumatanes (ASOCUCH) will recruit and train seed outgrowers to grow certified seed and will establish direct market access to buyers of the improved seed. Post-Cosecha will also establish a permanent potato seed laboratory in the Western Highlands.

FY17 Progress

In FY17, Post-Cosecha hired 61 outgrowers, focusing on youth. The company established 143 demonstration plots to compare its certified potato seed with traditional varieties, and trained 730 commercial potato growers in planting methods during 183 field days. Post-Cosecha completed construction of its greenhouse and processing facility, which will begin full operations in November 2017.

Partnering for Innovation modified Post-Cosecha’s agreement to remove payments for missed milestones and also to add a payment for an expanded sales milestone. This modification did not change the overall value of the award. Post-Cosecha failed to complete construction of its seed processing facility and lab on time because of the difficulties in building a high-tech tissue culture laboratory and associated greenhouses in the remote Western Highlands. Despite this setback, Post-Cosecha remains on track to meet its certified seed sales goals by the end of the partnership.
Feed the Future Partnering for Innovation is a United States Agency for International Development (USAID)-funded program that helps commercialize US and other agricultural innovations in smallholder markets by supporting public private partnerships that improve food security.

The program helps the private sector to scale and market agricultural innovations for smallholder farmers through competitive awards and knowledge exchange, facilitates partnerships between USAID Missions and the private sector, and provides business acceleration tools and services that increase businesses’ impact on smallholder farmers.

Through September 2017, 4,218 farmers have used new technologies through partnerships in Latin America and the Caribbean.
In FY17, Farmforce faced continued challenges in Guatemala with companies that have purchased but have not fully implemented the traceability software in the field. Partnering for Innovation funded an impact survey of Farmforce customers to better inform the project and Farmforce about these challenges. Surprisingly, the survey did not find the cost of the platform as a major barrier, but rather that resistance by staff to switch from paper-based systems to a software platform as well as a lack of urgency by company leadership of the need to comply with FSMA regulations are the main barriers.

Farmforce signed a new subscription with Servicios Internacionales de Exportación (SIESA) in Guatemala, bringing the number of subscribers to nine. The company developed new marketing materials and a coffee promotional video based on its contract with the Asociación Chajulense coffee producer group, which it will use to market to additional coffee companies in the region. Farmforce subscriptions now track 6,302 smallholder farmers on 5,571 hectares, whose production will comply with US import regulations under FSMA. Farmforce hired a consultant to perform cost-benefit analyses of four subscribers in Guatemala. The intent of these studies is to demonstrate the cost savings and other benefits of using Farmforce.

In July 2017, using funding from the USAID LAC Bureau, Partnering for Innovation signed an agreement with the Syngenta Foundation for Sustainable Agriculture to expand the commercialization of Farmforce in the Latin America and Caribbean region. This agreement will have Farmforce target six additional companies in at least four new countries in the region.
Solutions SA

Haiti
March 2017 – July 2018
Investment total: $655,681 (program: $376,491; partner leverage: $279,190)

Target: With full traceability and higher quality, the 9,000 smallholder mango farmers in the new producer groups will receive a price premium from exporters and continued access for their products to the US market.

Background

Through this partnership, Solutions, a Haitian IT company, with sub-partner GeoNova, is improving the export mango supply chain in Haiti by organizing growers into trained producer groups and establishing geotraceable database for each farmer member as well as training members in good agricultural practices, improved harvesting and postharvest practices. Using its proprietary Agro Tracking software, Solutions is providing full electronic traceability back to the smallholder farm for mangos grown by each assisted producer group, ensuring compliance with new US Food Safety Modernization Act (FSMA) regulations. Solutions and GeoNova will register 9,000 farmers comprising 300 producer groups in the Agro Tracking traceability system, resulting in the sales of 400,000 cartons of mangos to the export market.

FY17 Progress

In FY17, Solutions signed MOUs with two of Haiti’s largest mango exporters, Carifresh and Agropak, to purchase export-grade mangoes from farmers with full traceability back to the farm in compliance with FSMA rules. Solutions continues to market its service package with other major exporters to expand markets for the farmer cells registered in the system. Solutions registered more than 115 farmer cells in its traceability system, which represent more than 5,500 mango producers. 250 lead cell members have been trained on business management, good agricultural practices, improved harvesting, grading, and packing. The groups also receive kits with postharvest handling equipment to ensure mango quality. To date, farmer cell sales total more than 400,000 boxes of a dozen mangos each.

In the next ten months Solutions will expand its reach to include 300 farmer cells in its business model. Although exporters are committed to providing some traceability information, Solutions is unsure whether exporters will pay for traceability software until the US fully implements FSMA. The company is exploring other markets for AgroTracking, such as for use by FairTrade and organic producers of coffee and cocoa, as well as for program farmer impact monitoring. Solutions competes with other traceability products, including Farmforce, in the Haitian market and is keenly aware that it must compete both on price and service provision to win business from other exporters.
Malawi

Despite decades of peace and stability, Malawi remains poor and the economy heavily reliant on subsistence agriculture. Underdeveloped markets and low agricultural productivity pose barriers to growth and poverty reduction. Small land holdings, a poorly developed commercial seed sector, weak agricultural extension services, limited access to finance, and other policy constraints hinder agricultural development. USAID/Malawi is working with Feed the Future Partnering for Innovation to address these challenges by accelerating private sector engagement; identifying and scaling up agricultural technologies for smallholder farmers; providing technical assistance to evaluate Mission and private sector partnership needs; identifying business models for private sector engagement; and reducing the time it takes to implement public private partnerships.

Feed the Future Partnering for Innovation is a United States Agency for International Development (USAID)-funded program that helps commercialize US and other agricultural innovations in smallholder markets by supporting public private partnerships that improve food security.

The program helps the private sector to scale and market agricultural innovations for smallholder farmers through competitive awards and knowledge exchange, facilitates partnerships between USAID Missions and the private sector, and provides business acceleration tools and services that increase businesses’ impact on smallholder farmers.

Through September 2017, 38,617 farmers are using new technologies and services through partnerships in Malawi.
Opportunity International Bank Bank Malawi

Malawi
March 2015 – July 2017 (completed)
Investment total: $2,568,265 (program: $1,245,351; partner leverage: $1,322,914)

Impact: Opportunity International Bank Malawi (OIBM) disbursed more than 5,000 loans and trained more than 10,000 farmers in good agricultural practices and financial literacy. 19,408 farmers benefited from OIBM’s financial services.

Background

Ninety percent of Malawians are engaged in agriculture, yet sixty percent have never accessed any formal financial products or services that could increase agricultural production. Without access to banking services, Malawi’s farmers struggle to invest in agricultural inputs such as seed and fertilizer to increase their productivity and earnings.

Through this partnership, OIBM is working with Opportunity International and Catholic Relief Services to provide groundnut, soybean, and orange-fleshed sweet potato farmers in Malawi with banking services including production loans and some postharvest loans. To make these services more accessible and to improve loan repayment, the project will train groups of farmers in good agricultural practices and financial literacy. No less than 30 percent of the trainings and financial services will directly benefit women.

Partnership Achievements

Partnering for Innovation’s partnership with OIBM allowed the bank to diversify into new geographical areas and value chains, expanding access to finance and savings for smallholder farmers. Through this partnership, OIBM disbursed more than 5,000 loans (50 percent of borrowers were women) with an average loan size of $93, and trained more than 10,000 farmers in good agricultural practices and financial literacy. 9,272 farmers benefited from OIBM’s banking services.

The key to OIBM’s success was its village-level outreach in financial services training, and developing partnerships with other value chain actors such as input suppliers and off-takers to increase the level of services offered to the smallholder farmers and therefore the likelihood of farmers using financial services such as savings and loan products.

During this partnership, OIBM was acquired by First Merchant Bank Limited (FMB). A recent farmer impact survey showed that some farmers are not receiving the loan value requested and that loans are being disbursed too late to be useful. Moving forward, OIBM and FMB plan to continue offering financial products to the base of the pyramid, with a particular focus on providing mobile banking services. The recent acquisition will enable OIBM to scale up mobile money services and reach more customers. OIBM will seek further financial support to provide financial services and GAP trainings to more farmers in an effort to reduce default on loans.
Background

Rab Processors is working with Malawi’s agriculture commodity exchange (ACE) to strengthen the soybean, groundnut, maize, and pigeon pea value chains by using Partnering for Innovation support to establish three rural marketing and storage facilities (SRAMs) and a warehouse receipts program to expand smallholder farmer access to markets, leading to better prices for their production. Farmers can store their commodities at a SRAM for up to six months, during which time they can sell the commodity either to Rab or to another company. Upon depositing their commodity into the shared storage facility, farmers receive a receipt specifying the amount and quality of the product, which is then used on withdrawal of the product to determine how much of the commodity the farmer is due. Upon withdrawing their product for sale, the cost of storage services is deducted by Rab.

Through this system, smallholder farmers can remove and sell their commodity when prices are more favorable than they are at harvest. In addition, farmers can use warehouse receipts as collateral in obtaining bank loans.

Partnership Achievements

With support from Partnering for Innovation, Rab expanded its reach to smallholder farmers by building three new agricultural commodity marketing and storage facilities in rural areas that are underserved by bulk storage options. With the three SRAMs newly operational, Rab was able to procure more than 12,000 MT of commodity – mainly maize and soy bean – from 10,556 farmers. Approximately 80 percent of this commodity was sold to Rab through spot (cash) transactions, with the remaining 20 percent through the warehouse receipt system. In addition to the farmers using the SRAMs’ storage services, more than 15,000 farmers were trained on warehouse receipts.

A key to Rab’s continued success is sensitizing farmers on the benefits of the warehouse receipts system, and integrating the commodity buying and warehouse receipt model into its larger business model in Malawi. Despite training and marketing of warehouse receipts, utilization is still very low. A recent survey conducted by Partnering for Innovation found that despite the outreach efforts most farmers don’t understand the system and instead use spot markets or store at their farms instead of in a warehouse.

Rab is looking to scale the SRAM model to new geographical areas, including Jenda, Rumpfi, Mangochi, Zomba, and Ntcheu. It will also need to improve its outreach to smallholders about the warehouse receipts program.
Universal Industries

Malawi

February 2015 – July 2018

Investment total: $2,229,358 (program: $1,072,496; partner leverage: $1,156,862)

Target: At least 8,000 smallholder farmers will produce and sell a total of 8,000 MT of orange-fleshed sweet potato (OFSP) to Universal Industries, which will develop six OFSP products and commercialize at least four of these, reaching sales revenue of $136,000.

Background

Universal Industries, a leading food and beverage processor in Malawi, is working with the International Potato Center (CIP) to develop a commercial market for OFSP food products. Production of OFSP in Malawi has increased in recent years, but it is still perceived mainly as a subsistence crop. To build a market for this nutritious food, Universal is working with Partnering for Innovation to commercially launch several OFSP-based products and is building a sustainable supply chain by providing technical assistance, improved vines, and a formal market to 8,000 sweet potato farmers. Farmers will benefit from higher prices as well as a guaranteed market and Universal will develop a stable domestic raw material supply chain. Both rural and urban consumers will benefit from increased access to Vitamin A-rich OFSP foods, addressing a major nutritional deficit in Malawi.

FY17 Progress

Universal has reached 8,653 farmers with better market access, training, and improved OFSP planting material. Universal has been able to sell $20,000 worth of new value-added OFSP products and sees growing demand for items such as sweet potato chips, bread, cookies, and puree.

Universal continues to work with CIP and other local value chain actors to address the constraint of insufficient sweet potato production at the farm level to keep up with growing market demand. In addition to struggling to get the right types and volumes of OFSP varieties from farmers, Universal is also competing with imported internationally-branded products, primarily from South Africa. To address the raw material supply issue, Universal has formed a partnership with the Feed the Future Malawi Ag Diversification Activity to help it install irrigation systems for OFSP production on Universal’s farm and with selected outgrowers. Through these partnerships and additional investments to address supply constraints and competition, Universal is meeting the challenge of a growing market demand for value added OFSP products. However, although market demand for OFSP is growing, project champions within Universal still face challenges in demonstrating the benefit of these new products to the company’s bottom line.

In FY18, Universal Industries will focus on launching its newly developed processed OFSP products and scaling up overall sales, and therefore demand, for raw OFSP from its network of smallholder outgrowers.
Introducing a new agricultural innovation into smallholder markets is a challenging process. These base of the pyramid markets are expensive to reach, fraught with risk and generally provide low rates of return in the early stages of market development. This risk makes it all the more important to develop a solid marketing strategy that allows for effective targeting of sales and marketing efforts.

To address marketing challenges that companies face when targeting smallholder markets, Partnering for Innovation developed a Metrics for Marketing workshop that was held in Maputo, Mozambique in early 2017.

Over the course of two days, 24 attendees from 19 partner organizations in Mozambique, Malawi, and Zambia participated in interactive presentations and group discussions with experts in data analytics and market segmentation, and identified ways to integrate farmer data into their business decision-making process in order to more successfully target products to current and potential customers. The team, in tandem with USAID representatives, worked with businesses to develop an approach to this kind of data collection and gained a better understanding of the practical and cost constraints that the private sector must address in order to gather and use this data more effectively.

With food safety regulations gaining importance worldwide and consumers demanding food grown with fewer chemicals and a smaller environmental footprint, farmers need new, effective solutions that reduce chemical use and are safer for consumers, farmers, and the environment. Biological control products, a growing technology used by more agribusinesses worldwide, are on the way to meeting these needs.

To help Partnering for Innovation partners in Central America capitalize on this growing market trend, Partnering for Innovation convened in Guatemala 46 representatives from companies across North, Central, and South America that produce or sell biological products or export agricultural goods grown with biologicals and want to sell in Central America. The AgBio Lab participants learned about industry and investment trends and regulatory standards from US and regional experts, and took advantage of the event to develop a valuable network of contacts in this burgeoning industry.

The AgBio Lab was followed by a webinar that gave online participants the chance to learn more about global trends in the industry. Companies interested in expanding their business to new countries also learned about intellectual property considerations and overcoming registration and other regulatory barriers to the growth of this sector, which include issues such as the burden of undergoing complex registration processes in multiple neighboring countries that each have relatively small markets for biological products. In FY18, Partnering for Innovation will undertake a study of these barriers and make recommendations for addressing them.
Mozambique

Despite Mozambique’s recent economic growth and its strategic location in southern Africa, it still faces a number of challenges in developing its agriculture sector and reducing hunger. The most common challenge facing farmers is the lack of access to quality inputs and markets. The Mozambican agricultural market has an undeveloped agro-inputs distribution system with very few agriculture supply shops in rural areas. The few inputs that are commercially available are found in distant urban centers, inaccessible to most farmers. To address these challenges, USAID/Mozambique is working with Partnering for Innovation to accelerate engagement with the private sector, identify and scale-up agricultural inputs, and identify business models and approaches for private sector engagement. It also aims to reduce partnership development time, in order to more efficiently work with the private sector.

Feed the Future Partnering for Innovation is a United States Agency for International Development (USAID)-funded program that helps commercialize US and other agricultural innovations in smallholder markets by supporting public-private partnerships that improve food security.

The program helps the private sector to scale and market agricultural innovations for smallholder farmers through competitive awards and knowledge exchange, facilitates partnerships between USAID Missions and the private sector, and provides business acceleration tools and services that increase businesses’ impact on smallholder farmers.

Through September 2017, 122,384 farmers are using new technologies on 135,662 hectares through partnerships in Mozambique.
Overview: EMCL opened 23 hubs in Manica, Zambezia, Tete, and Nampula provinces. With all hubs and retail outlets operational, EMCL reached 60,248 farmers with commodity buying, input sales, mechanization, and storage services. The commodity buying business represented more than 80 percent of farmers that were impacted through EMCL’s interventions, with farmers having earned more than $66 million in sales of commodities to EMCL.

Major lessons learned from the partnership include the importance of supporting the input and mechanization outlets, since the entrepreneurs running these businesses need either prior experience and/or training/mentoring services in order to be successful; a more structured system to operate equipment rental services; and the need to establish partnerships with other value chain actors such as input suppliers. The majority of the entrepreneurs lack the product diversity, business acumen, and cash flow to manage demand for inputs and mechanization services. However, a partnership with another input supplier, such as TECAP, could help these entrepreneurs overcome the logistics and product inventory constraints, and provide professional support in retailing. EMCL needs to further promote their storage model, which is offered at no cost to farmers and can help manage crop storage and low price offerings at harvest.

EMCL is committed to the hub model in Mozambique and is also considering additional service provision such as an ICT platform that will allow it to more effectively gather data on its smallholder farmer customers.
International Development Enterprises (iDE) with Lusosem

Mozambique
November 2014 – July 2017 (completed)
Investment total: $2,229,162 (program: $1,098,149; partner leverage: $1,131,013)

Impact: 41 agrodealers and 203 farm business advisors (FBAs) supplied agro input products and services to 11,282 smallholder farmers.

Background

Lusosem, a Portuguese commercial seed and input supplier, is partnering with iDE and HUB Assistancia Technica e Formacao to enter the Mozambican market to distribute and sell high-quality seeds and other inputs. With Partnering for Innovation’s support, they are supporting the opening or expansion of 40 agrodealers and will train 200 farm business advisors (FBAs) to provide extension services to smallholder farmers. The partnership aims to develop a robust and sustainable market-based system of agrodealers in the heart of rural Mozambique where communities are traditionally underserved. The FBAs receive ongoing training to ensure they are able to provide quality technical assistance and support to 10,000 farmers, thus developing a market for their services and inputs supplied by Lusosem. FBAs receive a commission from the agrodealer for their input sales to smallholder farmers, and training fees from farmers and associations. The partnership is also helping Lusosem invest in lower cost distribution strategies using local seed and input suppliers as a result of a drastic devaluation of the local currency.

Partnership Achievements

iDE agrodealers and FBAs reached 11,282 farmers with input supplies, technical assistance, and commodity purchases. FBAs sold almost $42,000 worth of seeds and other inputs at local trade fairs and markets. Additionally, 13 agrodealers and FBAs were selected to receive Kiva’s input financing, with loan amounts ranging from $140 to $2,130. Lusosem is refocusing its activity in Mozambique and therefore iDE is now working with TECAP and seed supplier Klein Karoo to ensure there is access to seeds and inputs for these outlets. The project worked with Olam International on the aggregation and sale of sesame and cashew nuts, ensuring a market for farmers’ products and contributing to the profitability of the FBA model.

In an example of effective cross-partner collaboration, iDE is benefiting from a diversification and supply of inputs from TECAP’s farmer house in Nampula, which is a supply source for the FBA network in that region as it helps TECAP establish and expand sales. iDE is working with TECAP to continue to expand the FBA model and increase rural delivery of inputs, offtaking, and financial services. This will improve on the first phase of expansion, with the FBAs going through a more rigorous training, and TECAP providing more logistical support. Lusosem intends to stay in Mozambique, focusing on selling cereals and vegetable seeds through the TECAP farmer homes, possibly opening a warehouse in Chimoio, and is considering producing cereal seeds for local distribution.
NCBA CLUSA with Phoenix Seeds and Oruwera

Mozambique
November 2014 – July 2017 (completed)
Investment total: $3,341,079 (program: $1,527,810; partner leverage: $1,813,269)

Impact: Phoenix Seeds and Oruwera sold a cumulative total of 155 MT of legume and oil certified seed to 19,275 farmers, generating $339,000 in sales.

Background

NCBA CLUSA, Oruwera, and Phoenix Seeds are partnering to improve access to quality inputs and services for smallholders by providing extension services, land preparation and harvest services, and by improving seed production and distribution. Oruwera and Phoenix Seeds are developing ready-to-go input packages including seed, fertilizer, and inoculants for sale to smallholders, and are providing seed on commission to select agrodealers. With Partnering for Innovation’s support, Phoenix and Oruwera are expanding into new geographical areas and value chains and NCBA CLUSA is providing training and extension services. However, currency devaluation, civil strife in key distribution points, and government subsidized inputs have affected commercial input suppliers’ ability to effectively distribute and sell certified seeds in Mozambique.

Partnership Achievements

Phoenix Seeds and Oruwera sold a cumulative total of 155 MT of certified legume and oilseed to 19,275 farmers, generating $339,000 in sales. Although this partnership fell short of meeting its target for total MT sold, it was able to exceed its smallholder farmer impact numbers through investments in low-cost, last-mile distribution and marketing. In particular, developing cross-partner relationships with other Partnering for Innovation partners such as Export Marketing Company Limited and TECAP allowed more opportunities for third-party sales.

Some of the key challenges this partnership faced included farmers’ initial reluctance to pay for improved seed and the high cost of marketing through traditional brick and mortar sales networks. This resulted in slow initial uptake and high costs of goods sold. Through effective hub and spoke sales models targeting weekly markets and agrofairs, and continued sensitization to farmers, both companies are gaining traction as they understand and target the smallholder seed market. As a result, Phoenix Seeds is now assessing opportunities for expanding its seed sales within Zambezia province and to other, new geographical areas.
Opportunity International

Mozambique
November 2014 – March 2018
Investment total: $3,713,714 (program: $1,754,072; partner leverage: $1,959,642)

**Impact:** At least 5,000 smallholder farmers will gain access to loans and other banking services as well as training in good agricultural practices and financial literacy, and 3,000 smallholder farmers will open savings accounts or access M-PESA mobile money services.

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**Background**

Only two percent of rural households receive agricultural loans in Mozambique. Furthermore, more than 30 percent of rural Mozambicans live more than three hours from a bank, making it extremely difficult to access financial services such as saving accounts and loans. Many smallholders must borrow from unregulated moneylenders at exorbitant interest rates or sell their future harvest early at significantly reduced value to receive cash.

Through this partnership, Opportunity International, through a private local financial services provider, Banco Oportunidade de Mocambique (BOM), is providing sesame and soybean farmers with financial and banking services including loans, savings accounts, and mobile money services. By providing farmers with training on good agricultural practices and financial literacy, they are improving the potential for loan repayment rates. Opportunity International is specifically targeting women farmers for training and financial services.

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**Partnership Achievements**

BOM disbursed 557 loans to sesame and soybean farmers over the past year, for a total to date of 1,291 and an average loan value of $953. Additionally, 5,262 farmers have received training in good agriculture practices to date. The acquisition of BOM by MyBucks, a financial technology company that focuses on emerging markets, has resulted in some personnel and operational changes and affected the value and timing of loans being disbursed. Additionally, BOM has recently introduced larger collateral requirements for farmers in an effort to offset the risk of non-payment.

However, a recent Development Credit Authority (DCA) agreement between BOM and USAID, which commenced in August, will allow the bank to reduce farmers’ monetary requirements to receive a loan, which should increase both the number and the size of subsequent production loans. Additionally, and partly as a result of MyBucks’ preferred strategy, BOM is expanding the focus of its loans from smallholders to agrodealers and other small- and medium-size agricultural businesses, which are less risky and less work to manage than smallholder farmers. However, the bank remains committed to providing services for the smallholder market and is working with a consultant identified through Partnering for Innovation to explore and develop mobile money services that would make its work with smallholders easier and more efficient.
**Background**

The Mozambican agricultural market has a weak agro inputs distribution network, leaving most farmers without access to improved seed, fertilizers, pest management products, or equipment. Through this partnership, TECAP is expanding its Maputo-based service center, which it calls a “farmer house,” to three major agriculture producing regions: Tete, Nampula, and Manica provinces. These farmer houses will be based in the main city in each province, offering agricultural inputs and mechanization services. TECAP will also establish a network of 50 agrodealer shops, 20 franchisees, and train 250 agriculture development agents to accelerate its last mile distribution plan in small towns and villages in each province.

**FY17 Progress**

TECAP has operationalized and opened three farmer houses in Nampula, Tete, and Zambezia, generating $818,000 in sales and reaching 15,703 farmers. As it expands its satellite network of small shops, TECAP has found it more difficult to find entrepreneurs who have sufficient financing to purchase a franchise, so they have lowered the investment requirements. Additionally, TECAP is struggling to be the primary supplier to companies that are used to importing inputs and equipment from outside of Mozambique. It is investing heavily in marketing and promotional activities, creating a “buy in Mozambique” campaign to target these companies and increase sales. TECAP intends to invest in improved data collection systems to track sales data, which will allow it to more effectively target its customers with the right products at the right time. Partnering for Innovation is considering supporting the marketing and data collection initiatives by providing targeted technical assistance.

In FY18, TECAP will continue to market and promote improved inputs sold through its farmer houses to an additional 3,000 smallholder farmers, and will likely reach more than 20,000 smallholder farmers with improved inputs by the partnership’s end in July 2018.

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**Tecnologia e Consultoria Agro-Pecuaria (TECAP)**

Mozambique  
August 2016 – July 2018  
Investment total: $4,624,934 (program: $2,293,231; partner leverage: $2,331,703)

**Target:** Through development of a network of “farmer houses,” TECAP will be able to reach 18,750 farmers with improved inputs and access to mechanization services while generating at least $2.8 million in sales of its agricultural inputs and mechanization services.
Txopela

Mozambique
August 2016 – July 2018
Investment total: $1,634,439 (program: $847,735; partner leverage: $786,704)

Target: With Txopela’s support, Sociedade Beneficiamento Sementes (SBS) will produce and sell 450 metric tons of improved soy, pigeon pea, sesame, and common bean seeds. It will provide improved seed and other inputs, training, and offtaking services to 3,600 smallholder farmers, 20 percent of them women.

Background

Through this partnership, Txopela Investments and the cooperative COPAZA are investing in the creation of a company called Sociedade Beneficiamento Sementes (SBS) as a sustainable supplier of certified seed and other agricultural inputs in central Mozambique. With TechnoServe’s support in management, technical services, and impact monitoring, SBS will establish a facility for cleaning, grading, storing, and packaging improved seed for sale to local smallholder farmers. SBS will distribute other agricultural inputs and provide training, mechanization, offtaking, and other services to smallholder farmers.

FY17 Progress

With its seed cleaning, processing, and packaging facility now operational, SBS has begun to sell and distribute improved soybean seed to 2,800 smallholder farmers in the Zambezia region. By the end of November, it plans to distribute seed to an additional 800 farmers so they can capitalize on what should be a good agriculture season. SBS is gearing up to provide training and mechanization services to its outgrowers in addition to improved seed in order to sustain increased farmer productivity.

Partnering for Innovation recently conducted a survey of SBS beneficiaries and found that 65 percent reported higher yields compared with using non-improved seed. They report that because of this they will expand their purchase of improved seed in the future. Partnering for Innovation will continue to monitor the expansion of seed sales in order to gauge whether sales targets will be met in the coming season. 800 more smallholders are expected to sell commodities to SBS in FY18.
Partnering for Innovation

Nigeria

While agriculture in Nigeria accounts for more than 40 percent of gross domestic product and up to 60 percent of total employment, most Nigerian farmers face labor constraints and lack the necessary resources to maximize their productivity. A majority of smallholder farmers, who make up more than 70 percent of the total farming population, do not have access to mechanization or technology that would make farming more efficient. Working with the private sector through Feed the Future is central to USAID’s strategy in Nigeria, and Feed the Future Partnering for Innovation is helping address bottlenecks to inclusive growth by supporting private sector partnerships in agriculture.

Feed the Future Partnering for Innovation is a United States Agency for International Development (USAID)-funded program that helps commercialize US and other agricultural innovations in smallholder markets by supporting public private partnerships that improve food security.

The program helps the private sector to scale and market agricultural innovations for smallholder farmers through competitive awards and knowledge exchange, facilitates partnerships between USAID Missions and the private sector, and provides business acceleration tools and services that increase businesses’ impact on smallholder farmers.

Through September 2017, 18,751 farmers on 11,251 hectares are using improved technologies and practices through partnerships in Nigeria.
**Babban Gona**

Nigeria  
May 2016 – July 2018  
Investment total: $4,759,546 (program: $1,021,551; partner leverage: $3,737,995)

**Target:** 20,000 smallholder farmers will form cooperatives, receiving credit, inputs, technical assistance, storage, and market access for their products that will result in total new incomes of $2,000,000.

### Background

Smallholder farmers’ low economies of scale inhibit access to the credit required to purchase agricultural inputs, access to appropriate information on best practices to optimize yields, and the ability to store their produce to attain a higher price as the product value appreciates postharvest. In Kano and Kanduna states, Babban Gona is addressing this challenge by forming smallholder farmer cooperatives called trust groups, which will enable maize, rice, and soybean farmers to attain greater economies of scale for purchasing inputs, receiving credit and technical assistance, and storing and selling their harvests. Babban Gona provides member farmers with services such as management training, loans, and input purchasing, thereby increasing profitability and in turn improving household food security and livelihoods. This partnership expands the number of farmers formed into trust groups and expands the services the groups receive.

### FY17 Progress

In the last year Babban Gona has scaled its cooperatives from roughly 8,000 farmers to more than 17,000 farmers. These farmers receive services including training, input distribution on credit, field mapping and soil analysis, and harvest assistance. Additionally, Babban Gona acts as an offtaker, buying rice and maize from its member farmers and selling it on to large buyers like Nestle. In 2017, Babban Gona bought and sold more than $3 million worth of rice and maize. This success has led Babban Gona to pilot some new business models, including a last mile distribution network, which trains some of its top performing farmers as community agrodealers. This approach will reduce costs and provide additional revenue for Babban Gona and for the selected farmers, but it also provides a network of local distribution shops in remote rural areas where inputs previously have been very difficult to procure.

Babban Gona has not seen the results it expected from its initiative to promote soybean production. Soybean currently has a much lower profit margin than rice and maize, and therefore Babban Gona has made the decision to focus all of its current efforts on rice and maize.

Almost 2,500 more smallholders are expected to organize and market through Babban Gona in FY18.
Chi Farms

Nigeria
September 2016 – August 2018
Investment total: $1,969,198 (program: $983,255; partner leverage: $985,943)

Target: At least 1,000 smallholder fish farmers will access high-quality inputs, including fingerlings. An estimated 2,700 soybean farmers and 3,600 maize farmers will benefit from the procurement of their commodities for fish feed.

Background

Recognizing the need to increase Nigeria’s domestic fish production to meet growing demand, Chi Farms, part of the TGI Group in Nigeria, is expanding its capacity to produce high-quality inputs for smallholder fish farmers. Smallholder farmers in Kano and Sagamu states will have access to high-quality catfish fingerlings from Chi Farms’ multiple hatcheries, as well as aquaculture management training and financial management tools to provide the knowledge necessary to build successful aquaculture businesses. With Partnering for Innovation’s support, Chi Farms will expand its current feed production to include high-quality aqua feed, which will not only benefit fish farmers, but also soybean and maize farmers supplying raw material for the feed.

FY17 Progress

Chi Farms has finished recruiting and training two full teams of aquaculture experts that it calls client focus teams (CFT). One team will be dedicated to the southern region surrounding the Sagamu hatchery, which is now fully operational. The other team will be dedicated to the northern region, surrounding the Kano hatchery set to open in November. Through these CFTs, Chi Farms has trained 599 smallholder fish farmers in improved aquaculture production practices. These fish farmers have learned the proper way to build and maintain a pond, as well as feeding and hygiene techniques for their catfish. Additionally, Chi Farms continues efforts to facilitate financing for these smallholder farmers, so that they may purchase inputs and juvenile fish for a successful farm.

Chi Farms’ most pressing challenge is facilitating financing for its fish farmers. There have been negotiations with several banks, but most lenders are hesitant to provide loans to smallholder farmers. Even with Chi Farms acting as a guarantor, the banks are delaying or denying loans. Chi Farms is working closely with Women’s World Banking to address this challenge and is piloting a number of financing models. In some areas Chi Farms is testing providing inputs on credit to farmers, where costs are recovered through a buy-back of full-size fish from these farmers. In other areas, Chi Farms is working with farmers to form cooperatives, which have a better chance of receiving a loan from a bank or microcredit institution than individual farmers. Chi expects to sell to 7,300 fish farmers in FY18.
Hello Tractor

Nigeria
June 2016 – July 2018
Investment total: $1,982,334 (program: $989,470; partner leverage: $992,864)

**Target:** 24,500 smallholder farmers will have access to tractor services; 50 youth entrepreneurs will be trained in the business of owning, maintaining, utilizing, and promoting services for a fleet of Smart Tractors; and 15 youth technicians will be trained to repair Smart Tractors, allowing tractor owners access to timely maintenance.

**Background**

Recognizing the need for consistent and sustainable mechanization services for smallholder farmers, Hello Tractor is commercializing its Smart Tractor in Oyo, Federal Capital Territory, and Kano states in Nigeria. This partnership will provide proof of concept for Hello Tractor’s model. Hello Tractor is working with local banks to provide financing for entrepreneurs, mainly youth, to purchase a Smart Tractor, which is fitted with a GPS system and software that enable Hello Tractor to pair farmers in need of services with a Smart Tractor service provider via SMS. The technology allows smallholder farmers access to affordable tractor services that will increase their productivity, and creates a new business opportunity for youth entrepreneurs who become Smart Tractor service providers.

**FY17 Progress**

Hello Tractor continues to refine its work with agripreneurs as the company’s overall strategies develop. Over the past year it became evident that Hello Tractor would not be able to facilitate financing for the youth entrepreneurs to buy tractors directly from Hello Tractor. To date, negotiations with two commercial banks have stalled and no lending plans have been made available to the entrepreneurs. Because of this challenge, Hello Tractor reduced the target number of youth entrepreneurs in its network from 100 to 50.

Furthermore, Hello Tractor shifted sales strategies to focus more on selling its Smart Tractor device in bulk to owners of large tractor fleets and associations rather than selling the device and a tractor as a bundle. As a result, Hello Tractor has entered into a strategic partnership with the Tractor Owners and Hiring Facilities Association of Nigeria (TOHFAN). TOHFAN now requires all tractor owners to purchase a Smart Tractor device and pay the minimal monthly subscription fee. The owners have all been willing to do so because monitoring the tractor usage helps them save money and maximize tractor utilization since the device keeps the operators accountable for actual time worked.

As part of this strategic partnership, the trained youth entrepreneurs in Hello Tractor’s network will become members of TOHFAN, gaining access to apprentice programs with experienced tractor owners and opportunities for employment as booking agents where they can gain hands-on experience in the tractor value chain. The entrepreneurs will also gain access to TOHFAN’s tractor financing services where, if they can satisfy the terms, they have better prospects to be approved for a loan to purchase a tractor.
Niji Foods

Nigeria
September 2016 – November 2017
Investment total: $840,969 (program: $419,657; partner leverage: $421,312)

**Target:** Niji Foods is establishing three new cassava peel mash processing centers, training up to 750 women, creating 24 new long term jobs, and building the capacity of three women’s groups to take over partial ownership of the centers.

**Background**

Nigeria is the world’s leading producer of cassava. However, peels are left unused and wasted during processing. Through this partnership, Niji Foods, with support from the International Livestock Research Institute (ILRI), is establishing cassava peel processing centers in Oyo state for consolidating and processing cassava peels into mash that will be sold to animal feed companies as a low-cost substitute for maize. Niji Foods will also train 18 factory employees, six administrative staff, and 750 women cassava peelers and farmers on plant operations and business management to operate the processing centers. Ultimately, at least 6,480 metric tons of cassava peel will be processed, of which 2,945 MT of cassava peel mash will be sold to poultry and aqua feed companies in Nigeria.

**FY17 Progress**

Niji Foods has completed the construction of three cassava peel processing sites, which are now processing peel mash on a trial basis for feed companies Amobi Feeds and Premier Feeds. To date, Niji Foods has only processed samples for the feed companies, so that they can trial the mash in their products. No formal sales have been made.

In August Niji Foods completed training courses for 750 women cassava peelers and processors, two months ahead of schedule. The women were trained in proper peeling and processing techniques, quality control, and hygiene. These women will form the cooperative membership from which Niji Foods will source and process cassava peel.

This partnership continues to face management challenges and delays resulting from gaps in Niji Foods’ management capacity. As a result, the relationship with strategic partner ILRI has become strained. ILRI continues to test the quality of Niji Food’s peel mash product and has expressed concerns over its quality. However, Niji Foods is hesitant to adjust the processes that may be compromising quality. To address these challenges, Partnering for Innovation will explore options for strategic management consultants to build the capacity and business skills of Niji Foods’ team in FY18, particularly the person in charge of this partnership. Additionally, Partnering for Innovation is considering the possibility of engaging additional support for quality control and promotion of the cassava peel mash to meet market requirements.
Ukraine

Ukraine is a major global agricultural producer whose agriculture sector continues to adjust to a market-based system. A new group of small- and medium-size enterprises is supporting entrepreneurs and farmers to maintain a robust agricultural system, though conflict in the country’s eastern regions has posed a challenge in recent years, with the agriculture sector losing access to important markets and suffering decreased investment. By leveraging the expertise of commercial partnerships that benefit small- and medium-size agricultural businesses and farms in productive and profitable ways, USAID/Ukraine and Partnering for Innovation are increasing competitiveness, productivity, employment, and incomes in Ukraine.

Feed the Future Partnering for Innovation is a United States Agency for International Development (USAID)-funded program that helps commercialize US and other agricultural innovations in smallholder markets by supporting public private partnerships that improve food security.

The program helps the private sector to scale and market agricultural innovations for smallholder farmers through competitive awards and knowledge exchange, facilitates partnerships between USAID Missions and the private sector, and provides business acceleration tools and services that increase businesses’ impact on smallholder farmers.

Through September 2017, 8,848 farmers on 34,268 hectares are using improved technologies and practices through partnerships in Ukraine.
Agrico

Ukraine
August 2015 – August 2017 (completed)
Investment total: $2,223,541 (program: $672,068; partner leverage: $1,551,473)

**Impact:** Agrico more than tripled its storage capacity to 4,250 MT of high-quality seed potatoes leading to 487 farmers purchasing improved seeds.

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**Background**

Although Ukraine is one of the world’s largest producers of potatoes, most small- and medium-size farms do not use certified potato seed. Instead, they use old seed or purchase non-certified seed. The seed potato market in Ukraine is also characterized by poor infrastructure and high prices, barring access to better quality planting materials for many small- and medium-size farmers. To overcome these barriers, Agrico is producing and storing high-quality seed potatoes for sale to small- and medium-scale farmers and is also providing farmers with training and support in proper planting, cultivation, and harvesting of potatoes. Through this partnership, Agrico is increasing its storage capacity and training program.

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**Partnership Achievements**

With the support of this partnership, Agrico was able to more than triple its storage capacity, expanding from 1,200 MT of storage to 4,250 MT. This expanded capacity, coupled with continued client engagement and capacity building, resulted in Agrico selling more than 2,250 MT of improved potato seed, a 50 percent increase in sales revenue. Over the course of two years, Agrico trained 482 farmers in potato production and disease and pest control. The training workshops built the capacity of the farmers, and also helped Agrico better understand the importance of farmer engagement and relationship development. Through the workshops, Agrico has seen a significant uptick in client numbers and has now integrated farmer training into its business model.

Agrico has grown significantly over the last two years, despite the country’s economic downturn, and as a result is expanding into a new business line. Agrico will begin to buy back and aggregate potatoes from the farmers with whom it has been working. The potatoes will be graded, washed, and packaged, and sold to major retail chains in the country. This is a completely new profit center for Agrico and its small- and medium-size farmers. This business line expansion is already underway and Agrico has secured funding from the USAID-funded Agricultural and Rural Development Support Project to support this expansion.
Agrico says:

THANK YOU!
Agrobonus

Ukraine
July 2015 – July 2017 (completed)
Investment total: $2,223,196 (program: $1,006,843; partner leverage: $1,216,353)

Impact: 1,435 small- and medium-size farmers accessed fertility and field management consultations.

Background

The majority of small- and medium-size farmers in Ukraine do not have access to services that comprehensively analyze their soil. This lack of information constrains their productivity and efficiency. The government is supposed to provide soil testing services, however, its equipment is obsolete and it suffers from inadequate funding, leaving many farmers without access to these services.

Agrobonus, a leading national agricultural input distributor, is using funding provided by Partnering for Innovation to expand its service offering to include soil, plant, and water analysis aimed at improving farmer incomes and productivity. The company is offering these services through a state-of-the-art central laboratory and 16 mobile laboratories, and in addition to analysis results, will provide recommendations on how to improve soil health that will lead to more cost-efficient nutrient application and higher yields.

Partnership Achievements

The partnership with Agrobonus concluded August 31, 2017, by which point Agrobonus had successfully established a state-of-the-art laboratory and 16 mobile labs and provided soil testing services valued at more than $100,000. During the partnership, Agrobonus analyzed soil samples for 1,435 clients and conducted 16 workshops, training more than 800 farmers on the benefits of regular soil testing. These workshops proved to be so successful in attracting new clients to Agrobonus that the company held an additional 16 workshops over the life of the project. Through this work Agrobonus has realized the significance of developing client relationships for long-term, repeat business, as well as the importance of building the capacity of clients to be better farmers and thus better customers.

The partnership accelerated Agrobonus’s timeline for establishing the soil sampling and testing business and set the company up for successful growth and expansion in Ukraine. Over the last year, Agrobonus has seen a spike in demand for additional services, as well as demand in new regions in the country. The company had developed a five-year strategic plan to add new testing services, including plant analysis and water testing, to its product list. Agrobonus plans to open a second laboratory outside of Kyiv to offer services to a broader geographic area.
Bayer Ukraine

Ukraine
October 2015 – September 2017 (completed)
Investment total: $6,406,189 (program: $1,046,757; partner leverage: $5,359,432)

Impact: 840 sales representatives and 6,000 farmers were trained to adopt improved agricultural and farm management practices, resulting in a 10 percent increase in Bayer distributors’ sales and an 8 percent increase in Bayer’s direct sales.

Background
Most small- and medium-size farmers have limited access to knowledge about good farm management practices and thus do not utilize quality inputs effectively. To help its customers more effectively utilize the inputs it sells and simultaneously build brand loyalty, Bayer – with funding from Partnering for Innovation – is working with the International Finance Corporation (IFC) to design, field test, and implement a training package of 11 improved agribusiness practices in business management, financial management, crop management, and marketing for small- and medium-size farmers. Once Bayer and IFC have piloted the improved agribusiness practice activities, twenty of Bayer’s agricultural distribution partners will be trained in delivering these services to their customers.

Partnership Achievements
At the conclusion of this partnership on September 30, 2017, Bayer and implementing partner IFC had designed and rolled out 11 training modules for improved agribusiness practices. Using those modules, 840 staff members from Bayer and its distributor partners and 6,000 SME farmers were trained. As a result of this effort Bayer has realized the advantages distributors bring to its business. By working through its distributor network, Bayer is able to reach thousands more farmers than it could using its own staff. This means that more farmers will become knowledgeable and ultimately better informed customers. Similarly, through this process, Bayer has gained a better understanding of its customers’ needs and insights about its market. Using this new strategy, Bayer has seen an 8 percent increase in sales revenue and a 10 percent increase in sales revenue for the five partner distributors. Given this now proven success, Bayer will continue to refine the training modules and integrate direct farmer engagement into its business model.

Because of delays in implementing the partnership related to regulations compliance in the US and Ukraine, Bayer was delayed a season in commencing its field activities and requested an extension. Rather than extending the partnership, however, Bayer refocused on training distributors rather than distributors and farmers. This decision resulted in a modification to the agreement, which reduced the target for SME farmers trained from 20,000 to 6,000 and proportionally reduced milestone payments tied to the achievement of those targets.
International Charitable Fund Community Wellbeing (ICF CW) with Danone

Ukraine
July 2015 – September 2017 (completed)
Investment total: $3,293,327 (program: $684,873; partner leverage: $897,790)

Impact: 74 family farms were established, receiving new dairy equipment and training to increase milk production and income by 40 percent. 935 smallholder dairy farmers accessed milk cooling tanks for the first time.

Background

To increase small-scale farmers’ access to markets, ICF CW and its partners, including yogurt company Danone, are working with Partnering for Innovation to improve dairy milk quality by training family farmers in state-of-the-art milk production, including the use of improved cattle breeds, cooling tanks, milking machines, and other modern equipment. Family farms, which have 10 or more head of cattle, will serve as collection centers for local smallholder farmers who typically milk fewer cows, providing these farmers with quality testing and refrigerated storage. Danone and other commercial dairies will then purchase milk produced by these small dairies, providing more farmers with new market access and the dairies with a higher quality product.

Partnership Achievements

By the end of the partnership in September 2017, ICF CW had established 74 family farms, providing the farms with modern equipment designed to help improve the level of care given to cows and milk handling, which in turn increases milk quality. Additionally, the family farmers and 935 other smallholder dairy farmers were trained on good hygiene, proper feeding, and farm management. As a result of these efforts, more than 17 million liters of milk valued at $3 million were produced and sold through these farms. Within the last year, ICF CW began to engage local governments to strengthen legislation for the support of family farms and cooperatives. ICF CW will continue to engage local governments and other partners as it expands its family farm model in Ukraine.

Given the economic instability in the country and a decline in milk prices over the past two years, ICF CW faced a number of challenges in implementing this work. The main challenge was the collapse of its bank, which resulted in funds being frozen. This, coupled with dropping milk prices and a shrinking market, led ICF CW to request an extension to the end date of the partnership. The end date was extended from July 31, 2017 to February 28, 2018. However, with shifting USAID priorities and a continuing market decline, the partnership was reevaluated in January 2017 and it was decided all activities should be concluded by September 15, 2017. The partnership was renegotiated, resulting in a $684,872 decrease in program funding, a $1,025,792 decrease in leverage, and a decrease in beneficiaries by 100 family farms and 135 smallholder farmers. The new targets of 70 family farms established and 865 smallholder farmers trained, were exceeded by the end of the partnership.
Zambia

Zambia has experienced strong economic growth in recent years and improvements in infrastructure and policy have made it a promising place to do business. Unfortunately, the country’s progress has not extended to its rural areas, where poverty rates and malnutrition remain high. Still, the country is well suited to agriculture, with fertile land and ample water. Investments in agricultural production and diversity, markets, and nutrition are helping increase farmers’ productivity and income, and allow them to take advantage of the market opportunities presented by the country’s growing urban market. To help farmers in Zambia meet their potential, USAID/Zambia is working with Feed the Future Partnering for Innovation to expand market opportunities, increase access to improved agricultural inputs and mechanization, and develop better quality technical advisory services for smallholder farmers.

Feed the Future Partnering for Innovation is a United States Agency for International Development (USAID)-funded program that helps commercialize US and other agricultural innovations in smallholder markets by supporting public private partnerships that improve food security.

The program helps the private sector to scale and market agricultural innovations for smallholder farmers through competitive awards and knowledge exchange, facilitates partnerships between USAID Missions and the private sector, and provides business acceleration tools and services that increase businesses’ impact on smallholder farmers.

33,090 farmers on 55,680 hectares will have used new agricultural innovations through partnerships in Zambia by the end of the program.
Amatheon Agri

Zambia
March 2017 – August 2018
Investment total: $1,789,157 (program: $821,397; partner leverage: $967,760)

Target: Amatheon is integrating 6,000 additional smallholder farmers into its outgrower scheme, providing access to higher value markets, enhancing productivity and incomes, increasing access to finance and inputs, and improving food security and nutrition.

Background

Amatheon, a Zambian agricultural company, has a large-scale farm and supplements its production by sourcing commodities from smallholder outgrowers in the vicinity of their farm. In an effort to expand its outgrower scheme to 6,000 new smallholders, Amatheon has received funding to provide these farmers with training in conservation farming and business skills, access to inputs and markets, and linkages to financial services. They will also establish 20 new rural aggregation and input depots, and one new seed bank.

FY17 Progress

Amatheon has continued its expansion and farmer engagement in Chibombo district, training 60 lead farmers and establishing 10 depots. The lead farmers will be responsible for training 50 other farmers in their communities. The depots serve as collection sites for farmers to sell their crops, as well as input shops where farmers can purchase necessary items for production.

This year Amatheon faced a significant challenge with falling commodity pricing and reduced market access. As a result, it has reduced the volume of commodities procured from smallholders. Commodity prices for maize, soybean, groundnut, and cowpea in Zambia and regionally are less than half of what they were the previous two years. Factoring in distribution and storage costs, Amatheon has had to reduce the amount that it procures and stores from area smallholders this season. Since much of Amatheon’s purchases from farmers has been sold regionally, there is little demand and its storage facilities are full. These challenges have resulted in Amatheon missing one sales target with others for next year in doubt unless the market picks up. To address this, Partnering for Innovation is exploring additional activities Amatheon may take on to help reduce the impact of low prices on its outgrower farmers.
Good Nature Agro Products

Zambia
March 2017 – August 2018
Investment total: $1,002,462 (program: $476,504; partner leverage: $525,9582)

Target: Good Nature will add 5,200 smallholder farmers to its outgrower network and train an additional 80 private extension agents.

Background

One of Zambia’s greatest agricultural challenges is a lack of high-quality early generation and certified seed in appropriate quantities and locations for smallholder farmers to access. Good Nature is addressing this issue by expanding its seed outgrower network with support from Partnering for Innovation. Limited supply of foundation seed is a key bottleneck in the legume value chain in Zambia, so Good Nature is also developing its own foundation seed farm that will allow it to deliver high-quality foundation seed in a timely manner to its outgrowers. It is also expanding its private extension agent network and providing soil analysis and creating an organic fertilizer blend specifically targeted for use by smallholder legume seed farmers.

FY17 Progress

Good Nature continues to expand its outgrower model into new geographic areas and to train farmers and private extension agents (PEAs) in good agricultural practices. As a result, Good Nature exceeded its initial production targets, with many farmers seeing a 20 percent productivity gain this year. Additionally, Good Nature has successfully certified all of its field supervisors with the Seed Control and Certification Institute (SCCI). This process has improved Good Nature’s seed production efficiency because there is no longer a delay in waiting for an SCCI agent to verify fields and seeds. Now, Good Nature field supervisors can do the verification themselves during their regularly scheduled field visits.

This year Good Nature began to shift its focus from wholesale to retail sales to increase smallholder farmer access to its seeds. This is a major shift for the company since reaching the large and disbursed network of retail shops requires additional investment of time and money in outreach to numerous agrodealers. While this will prove to be a challenging move for the company, the company feels that these networks are key to getting their seeds out to last mile markets across Zambia.
**MRI-Syngenta**

Zambia  
March 2017 – August 2018  
Investment total: $1,843,487 (program: $918,617; partner leverage: $1924,870)

**Target:** MRI-Syngenta is setting up 20 seedling production and propagation facilities that are owned and operated by entrepreneurial “young plant raisers” who will conduct extension, training, and marketing field days to more than 12,000 smallholder farmers.

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**Background**

To meet the rising demand in Zambia for horticultural products like tomato and cabbage, MRI-Syngenta is building a sustainable seedling production and distribution business for the horticulture sector by establishing seedling production and propagation facilities and training youth operators to conduct training and marketing activities for farmers with funding from Partnering for Innovation. Training materials include CropLife’s safe use of crop protection products course. By promoting the hybrid seedling market, MRI-Syngenta is also addressing a lack of quality seed stock and increasing the awareness and appreciation of farmers of the value of hybrid seeds. It will also increase economic prospects for youth in agriculture.

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**FY17 Progress**

MRI-Syngenta has completed training 20 young entrepreneurs – “young plant raisers” – and provided each with the necessary equipment to start their own seedling production and sales businesses. MRI-Syngenta supplies these entrepreneurs with everything they need to be successful, from greenhouse equipment to proper soil for seedlings. In exchange for the equipment and training provided, the entrepreneurs commit to buying MRI-Syngenta products exclusively for five years, allowing MRI-Syngenta to recover its costs and grow its market. The entrepreneurs are each responsible for training 600 smallholder farmers in best practices for planting and maintaining seedlings to maturity. Through this outreach the entrepreneurs will be able to secure seedling sales to a minimum of 300 smallholder farmers each over the life of the partnership.

In addition to the entrepreneurs, MRI-Syngenta has focused on increasing access to markets for smallholder farmers and is exploring potential strategic partnerships with organizations such as Private Enterprise Program (PEP) Zambia and iDE to assist facilitating market linkages. MRI-Syngenta recognizes that if smallholders have nowhere to sell their produce they will not continue to buy seedlings from the entrepreneurs, reducing demand for MRI-Syngenta products. Ensuring the entire value chain’s success is critical to MRI-Syngenta’s success in Zambia.
I don’t know how I can show my appreciation for you people. I don’t know how to try and thank you people. What I can do now is show you how your money is working. You will see! I’m very sure there will be a very good result.

Thomas Mulayai, young plant raiser for MRI-Syngenta, Zambia
TechnoServe with Community Markets for Conservation (COMACO)

Zambia
December 2016 – July 2018
Investment total: $2,421,216 (program: $1,198,883; partner leverage: $1,222,333)

Target: COMACO and TechnoServe will initially train 10,000 farmers, including introducing them to new revenue streams such as honey production and poultry rearing.

Background

Community Markets for Conservation (COMACO) and TechnoServe are increasing the production capacity of farmer cooperatives that supply raw agricultural commodities such as honey and groundnuts for COMACO’s “It’s Wild!” brand with Partnering for Innovation’s support. Through its cooperative structure, COMACO provides market opportunities for its farmer suppliers. In order to expand its capacity to access product as well as improve the livelihoods its cooperative members, COMACO is working with TechnoServe to develop a training program that provides business and good agricultural practices, as well as additional business and marketing training to COMACO.

FY17 Progress

With support from TechnoServe, several business analyses were conducted to evaluate COMACO’s capacity, including a business model assessment report, a market and customer study, a comprehensive product profitability analysis, and a roadmap outlining the steps required for the transition of COMACO to a for-profit company. A number of recommendations for improving efficiency and profitability in order to ensure long-term sustainability of the company resulted from this process. For example, COMACO is revising processing techniques and increasing mechanization to reduce the cost of production. Additionally, from these analyses, COMACO has realized a need to refocus on its higher value products under the “It’s Wild!” brand, reducing the number of low-margin product offerings, and streamlining production processes. These changes will make COMACO a better and more profitable business, resulting in increased engagement with the cooperatives it supports and from which it sources raw materials. Throughout this process COMACO continues to train members and buy raw materials from its cooperatives. It has streamlined and standardized trainings using MP3 lesson recordings in order to expand the number of farmers with access and improve training quality. To date, 78 lead farmers from 23 cooperatives have been trained in conservation agriculture and business management.
3. Acceleration Services

Acceleration services help build stronger businesses that are better equipped to work in smallholder markets, ensuring long-term and large-scale commercial impact on the sector. By identifying and addressing “pain points” that are holding back the commercial progress of its partners, Partnering for Innovation strengthens their sustainability and profitability, and by extension, the likelihood of more positive impact on smallholder farmers.

- **On-demand, customized services**: Partnership managers work with partners in regular conference calls to identify implementation issues that may require acceleration and business support services. The requests are prioritized according to stated needs, potential impact of provided services, the partnership end date and necessary timing of services, and available program resources.

- **Cross-partner analyses, resources, and tools**: Partnering for Innovation develops a study, resource, or tool in response to common challenges or needs facing multiple partners. The program also coordinates with other innovation acceleration programs to share tools and methodologies, given common challenges between these programs. An example is the collaboration between Partnering for Innovation, Powering Agriculture: An Energy Grand Challenge for Development, and Securing Water for Food: A Grand Challenge for Development partners.
In FY17, Partnering for Innovation provided on-demand acceleration services to the following partners:

**Customized Services**

- **AATF**: Rana Labs produced videos to train input supply shopkeepers on the benefits and technical application of StrigAway seeds.

- **Niji Foods**: A consultant provided strategic and management support to the CEO and senior management for developing business and marketing plans for Niji’s cassava peel mash product line as well as for staffing and human resources development.

- **Agrico**: EUNite business consulting worked with Agrico to expand into new Ukrainian potato markets, and included market analysis, commercial expansion plans, and a long-term growth strategy.


- **Opportunity International**: MyBucks is piloting a new mobile money service with smallholder customers of Banco Oportunidade de Mocambique (BOM) in the Manica province of Mozambique that includes training rural clients and merchants to register for and successfully use the service for agriculture transactions.

- **Grameen Foundation/Musoni, Farmforce, AISL, MEA, Rab, BOM, iDE, CLUSA, and Txopela**: Fintrac’s Food Analytics and/or a local consultant, MozImpact, conducted impact surveys to identify some basic ways that partners could increase their commercial impact on smallholder farmers.
Cross-Partner Services

• **Metrics for Marketing Lab:** Held in Mozambique, this workshop brought together more than 40 attendees from southern Africa, including Partnering for Innovation partners, USAID representatives, and data and marketing experts to discuss the value of data for reporting farmer impact and improving marketing and sales strategies. Participants learned how to collect, store, and analyze customer data and use it to make more informed business and marketing decisions, and also were introduced to the concept and a tool for segmentation, targeting, and positioning (STP) customers, a common marketing strategy. Here is what a few of the participants said about the workshop in feedback surveys after the event:

  “I learned about additional sources of data that will be very useful for analyzing my market/client.”

  “[I gained] valuable experiences on data collection: data needs, sources, methods, and exercises on planning with a limited budget. Great networking!”

  “I learned a lot about the important tools and strategies that can help data and its direction for marketing.”

  “I will begin to use my company data for social reporting and marketing [because] our most available company data is underutilized – we need to make the most of it for profitability.”

• **AgBio Lab:** Held in Guatemala, this workshop brought together industry experts and innovators to engage on new market opportunities for companies producing biological control products, which have the potential to improve Latin American farmers’ product quality and market access. Why? As international markets demand that more crops are grown with fewer synthetic chemicals, Latin American exporters are being challenged to use fewer chemicals in production. The workshop focused on international and regional market trends, approaches to accessing and using biological products, regulatory challenges in registering biologicals in new markets, and investment opportunities in biological solutions. Here is what a few of the participants said about the workshop in feedback surveys after the event:

  “I learned about the market trends, the advances in use of bio pesticides, approaches, specialized people, businesses, and their efforts.”

  “I met people interested in my products, so I learned about requirements, labeling, etc. for the market.”

  “I loved the event. Very well organized, excellent methodology, information, and contacts.”
• **Pitch Materials:** Over the life of the program, several “pitch” resources were developed for AgLabs and customized acceleration. These pitch resources were streamlined into one final resource with a partner example. It is shared with partners on an as-needed basis.

• **Missing Markets Overview:** Partnering for Innovation, together with the informal “cluster” learning group of Powering Agriculture: An Energy Grand Challenge for Development, and Securing Water for Food: A Grand Challenge for Development, completed a report about reaching women customers in agriculture. The guide is a thorough learning resource; however, partners found the document too lengthy. Partnering for Innovation created a shortcut version linking to relevant resources for partners to quickly access and use in their distribution and sales strategies.

• **Research to Commercialization:** This cross-partner study looked across eight partnerships that focused on the process of commercializing publicly-funded research. The study involved a desk review of relevant documents and studies, interviews with commercial partners, universities and research centers, and external experts and resulted in eight common success factors for commercializing publicly-funded research. The intention is to disseminate the resulting report and case studies to spark discussion about the need to develop better commercial pathways for applying research in ways that ultimately benefit smallholder farmers and agricultural development generally.
4. Knowledge Exchange

Partnering for Innovation’s knowledge exchange activities encompass knowledge management as well as communications and marketing. The program facilitates knowledge sharing with and between its partners as well as the wider development community, including the private sector, investors, and development organizations and programs. These activities strengthen stakeholders’ ability to successfully commercialize agricultural innovations in smallholder markets and expand beneficial connections.

Knowledge Management and Program Learning

Partnering for Innovation captures and shares lessons learned as an integrated component of its daily activities. Knowledge management activities such as weekly team spotlights, dedicated knowledge management questions in partner management calls, and monthly, in-depth staff knowledge sharing sessions help capture and distill lessons on what does and doesn’t work in commercializing agricultural technologies in smallholder markets and how to most effectively use the resources of a mechanism like Partnering for Innovation.

- Two brown bag presentations at USAID were completed in Q1 and Q2. The first focused on providing a deep-dive into four partnerships, followed by a facilitated discussion, and the second featured a presentation by Hello Tractor showcasing its approach and how, by using impact evaluation data, the company is improving its marketing. The third and fourth brown bag presentations were originally scheduled as “going back to basics” discussions to transfer knowledge to USAID staff about how Partnering for Innovation incentivizes private sector businesses and enterprises to address development challenges. However, because of scheduling constraints these brown bags will be held in FY18.

- Five Tech Talk webinars were held. The first two provided a platform for partners Tolaro Global and AISL to share their story and products with an audience that included potential partners and funders. Two Tech Talks focused on “metrics for marketing” to demonstrate how farmer-level data and analysis can be useful for both reporting social impact, and improving business strategy and sales. The final Tech Talk featured market trends for biological control products in Latin America and built on the lessons of the AgBio Lab held in Guatemala.

- Best practices discussions were held with other practitioners such as the East Africa Climate Smart Agribusiness Investment Project, USAID’s Securing Water for Food: A Grand Challenge for Development, Powering Agriculture: An Energy Grand Challenge for Development, the Global Development Lab’s applied innovations team, and the Food for Peace TOPS program on building public private partnerships that benefit smallholders farmers.

- Bundling examples for reaching the “last mile” of rural farmers were profiled and presented at a two-day workshop organized by Catholic Relief Services that focused on commercializing seed distribution.

- Universal’s OFSP crisp line was featured, along with representation from staff, at a USAID/USDA/North Carolina State University meeting about the sweet potato industry in Charlotte, NC.

- An inaugural podcast episode was completed and additional five podcasts will be produced for sharing lessons through the audio storytelling medium about how to commercialize products and services in smallholder markets.

- The AgTechXChange featured 44 Learn! posts written by Partnering for Innovation staff and a member survey was completed for planning the status and future of the AgTechXChange. Results are being assessed and will be reported in the next semiannual. Posting funding and acceleration opportunities remains a challenge, though in FY18 a part-time intern is helping to source and vet opportunities to post.
Marketing and Communications

Marketing and communications activities in FY17 started to prepare for the program’s final year and the upcoming push to share lessons learned on the effectiveness of the Partnering for Innovation approach to development.

The program developed three new channels to share information about Partnering for Innovation’s work and engage its audience: the Resources page and Stories page on the Partnering for Innovation website, and the program Instagram account.

Four articles were published in the Feed the Future newsletter: Universal Industries’ development of value-added orange-fleshed sweet potato products in Malawi; the women entrepreneurs running Export Marketing Company Limited’s input and mechanization shops; how partners with US connections are contributing to agricultural development around the world; and Chi Farms’ development of new market opportunities for fish farmers.

Several written products that position Partnering for Innovation as a subject matter expert in the field of commercializing agricultural innovations in smallholder markets were published. The Global Forum for Rural Advisory Services published a Global Good Practice Note about private sector provision of rural advisory services; a report summarizing research on targeting women customers in smallholder markets was published on the Partnering for Innovation website; and a three-part blog series about seed market systems was published on Agrilinks.

In addition, with Partnering for Innovation’s nomination for a P3 Impact Award, the program conducted a Twitter chat and other social media publicity that publicized the partnership with EthioChicken.

Finally, the groundwork was laid for several important final year projects. A videographer was identified to create a program video; scripts were started for two animated videos to accompany the final guides; and a publicity campaign for the upcoming program podcast was developed.
AgTechXChange

The AgTechXChange, Partnering for Innovation’s community platform for knowledge exchange, featured 44 posts on a variety of topics in its new Learn! blog in FY17. A special feature called “Ask the AgTech Team” was also added to the AgTechXChange, as well as a “Partner Portal” for Partnering for Innovation partners to access resources. Since then, community members have been reaching out through that feature to get more information on specific innovations; however, direct partners are finding the site to be less useful than general community members that did not receive Partnering for Innovation support. Partnering for Innovation thus focused on sharing practical lessons learned in the latter half of FY17 to the wider AgTechXChange membership.

As a result of the diverse content and associated social media outreach, readership trended upwards in the first half of FY17 and averaged out across the second half. In FY17 as compared to the previous fiscal year, average daily views increased, as did “likes” and “responses,” showing some improved member participation, though the majority of AgTechXChange members are accessing and reading content rather than creating or discussing content among members.

Looking to the Future

After five years, the AgTechXChange is steadily improving its content, viewership, and activity, and has refined its overall purpose and objectives. At the start of the program it was conceived as an online marketplace for potential investors to view Partnering for Innovation partnerships. However, investors are less likely to use online resources than in-person meetings for investment-ready businesses. The platform is instead helpful to individual entrepreneurs to access resources and tools, and to connect with each other and open opportunities for grant capital. This can be seen from usage trends. A survey carried out in Q4 of FY17 will further inform the final steps and decisions about the future of the AgTechXChange in the program’s final year.
5. Partner Challenges

External Factors

Partners in Mozambique and Nigeria faced challenges earlier in the reporting period related to currency devaluation and security concerns, which disrupted supply chains, delayed technical assistance, and increased the costs of transportation and distribution. In Mozambique, the currency is finally beginning to strengthen against the dollar and the security situation has drastically improved. Because of these improvements, Partnering for Innovation partners, for the most part, have gotten back on track with implementation.

However, partners including AISL and NCBA CLUSA have struggled to overcome expectations of farmers to receive heavily subsidized or free inputs after years of government and NGO programs that gave away inputs. Low commodity prices resulting from a regional bumper crop in southern Africa have been a challenge for large and small commodity buyers like Amatheon and EMCL, both of which are dealing with surplus supply and import restrictions that block market options. Additionally, Malawi and Zambia still have an export ban on maize in place despite this year’s bumper crop, and this is depressing prices and margins for a number of partners in the region. In Latin America and the Caribbean, exporters are slow to adopt traceability software while FSMA implementation is not in force until late 2018, leaving these companies without immediate incentive to update their systems and posing challenges for Farmforce and Solutions software sales. A key lesson is that agriculture markets are dynamic, particularly so in regions where Partnering for Innovation works, and potential changes in basic assumptions made at the beginning of a project should always factor into due diligence analysis.

Company management and champions

Staff turnover, loss of a project champion at a partner organization, or lack of senior staff with requisite business experience have resulted in implementation challenges for several partners over the reporting period. For example, Niji Foods is a broadly diversified Nigerian business involved in food, manufacturing, hotels, and entertainment and is led by a young businessman who has not expanded his internal management staffing to sufficiently plan and direct a large donor effort, and therefore requires significant oversight and input from Partnering for Innovation to keep implementation on schedule. Txopela, a Mozambique-based real estate trust, is new to the agriculture space and relies heavily on subpartner TechnoServe to provide the agribusiness expertise to implement its program. Staff turnover at TechnoServe, combined with inexperienced leadership at Txopela, has required significant Partnering for Innovation staff time to ensure that proposed workplan activities remain on track. MEA, a commercial fertilizer company in Kenya, was initially successful in meeting project milestones but when the champion left the company, MEA was very slow to assign a new manager dedicated to the effort. After significant interaction between MEA’s leadership and program staff, and a missed milestone and payment, MEA assigned a new manager and the project is getting back on track. Open and regular communications increasing in frequency when issues arise is critical to anticipating and addressing these types of challenges.
Construction

Construction is integral to producing and scaling technology, so it has been a common feature in many partnerships funded by Partnering for Innovation. Land acquisition and building, as well as procuring, importing, and installing manufacturing equipment, is extremely challenging in most developing countries. The overlay of US government-mandated review requirements for construction, introduced midway through the program, added another level of compliance. Construction completed beyond initial milestone dates has been the rule rather than the exception, with partners ranging from EMCL in Mozambique constructing 23 hubs, to Tolaro in Benin building a single processing unit, to Twiga Foods in Kenya constructing collection centers, to Servicios de Post-Cosecha in Guatemala and Agrico in Ukraine building potato production and/or storage facilities experiencing delays. While good reasons for delays abound, proactive interaction with partners during the construction process, including site visits or requests for photos showing progress, can help anticipate and address delays.

Seed Production

Improved seeds are an indispensable technology required for boosting production in the countries where Partnering for Innovation works. There is perhaps no more difficult business to be in, nor partnership to manage, than seed production and sales. Challenges in this sector range from identifying and acquiring improved foundation seed from international research bodies by seed producers, to scaling up hybrid seed production either through a central operation, such as Phoenix Seeds in Mozambique, or through a number of dedicated outgrowers such as AATF’s seed partners in Kenya, Tanzania, and Uganda. Production is affected primarily by weather, particularly rainfall, but also by pest problems, theft, side-selling and outgrower inexperience. In order to be of value, seeds must be certified, typically the role of a government certifying body, usually with delays and always at a cost. Once produced and packaged, demonstrating and marketing improved seeds are additional costs that must be managed. Seeds in the tropics generally do not remain viable unless properly packaged and stored, and all should have clearly marked expiration dates. Sales margins are very tight, and risks high for seed enterprises. Experiences with AATF in East Africa, NCBA CLUSA in Mozambique, and Stewards Globe in Zambia have provided the team with valuable lessons on how to structure and manage seed partnerships. These include identifying seed producers with established track records of performance; planning investments in irrigation and pest management; training outgrowers to ensure high seed productivity; and adequate support for demonstrations and training, particularly for sales agents.
6. Lessons Learned

Partnering for Innovation integrates learning on two basic categories into everyday activities: 1) internal lessons about implementing the Partnering for Innovation mechanism; and 2) external lessons about commercializing products and/or services that bring development outcomes in smallholder agricultural markets. This section documents lessons learned within each of those focus areas.

### Technical Lessons Learned Across Partnerships

<table>
<thead>
<tr>
<th>Challenge</th>
<th>Lesson</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Accessing financial products for smallholder farmers:</strong></td>
<td>Include additional program support for enabling business environments: As reported in FY16, some Partnering for Innovation partners able to build credit and loan facilities within their product offerings and sales strategies are doing so, and some innovative partners, such as Musoni and OIBM, are bringing financial services to this market. However, it remains a major challenge especially where interest rates are high. Coordinated interventions by USAID and other implementers could help address this critical constraint.</td>
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<tr>
<td><strong>Identifying the role of grant capital:</strong></td>
<td>Establish additional criteria for directly investing in private sector partnerships: While grant capital can help fill the funding gap for companies to reach smallholder markets, it must be invested strategically to ready companies for future debt or equity financing. Additional criteria for assessing a private company’s financial viability and market potential at the start of the partnership can help set realistic expectations, build investment readiness into partner milestones, and ensure the partner receives appropriate and timely acceleration support to prepare them for investment by the end of their partnership.</td>
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<tr>
<td><strong>Getting company partners investment ready:</strong></td>
<td>Include active outreach outside of the USAID ecosystem: In addition to expanding the criteria for grant capital, fostering networks outside of USAID partnerships to support partners’ financing transition is needed. This will help further leverage USAID’s investment and impact while also ensuring sustainability of the enterprise.</td>
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<tr>
<td><strong>Distribution:</strong></td>
<td>Invest in distributors to help all partners address distribution challenges: While commercial distribution challenges differ across regions or countries, Partnering for Innovation’s flexible milestone-based award allows for companies to quickly assess and adjust their business strategies to adjust to changing circumstances and business environments. However, the program has primarily invested in agricultural technology and service providers to distribute individual products and services to smallholder farmers; in addition, the program should also be targeting distributors with excellent last mile delivery networks already in place to distribute multiple new innovations to smallholder customers. For future programs focused on engaging private sector partners to achieve development goals, partnerships with a more balanced portfolio of investment in both technology and service providers and distribution companies is recommended.</td>
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- Commercial distribution differs across regions or countries, and in some cases companies may need to adjust their business strategies to meet changing circumstances and business environments.
## Management Lessons Learned

<table>
<thead>
<tr>
<th>Challenge</th>
<th>Lesson</th>
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<tbody>
<tr>
<td><strong>Processing milestones:</strong> Throughout FY17, subaward milestones across partners, particularly in Mission buy-ins that are in the final stages, came in steady waves, requiring a high level of staff effort for satisfying the means of verification criteria.</td>
<td><strong>Keep milestones lean:</strong> Milestones represent the commercial value and the social impact for each partnership, and create concrete expectations for impact delivery while responsibly stewarding taxpayer dollars. It is therefore important that each is 100 percent satisfied prior to approval. However, to keep milestone development quality and fulfillment levels high, it is important to design “lean” milestones that directly relate to either commercial or social impact rather than an exhaustive list that has less significance to the partnership outcome.</td>
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**Working with the private sector:** The role played by the private sector as a potential development partner in meeting Feed the Future objectives is often not well understood by USAID. | **Provide ongoing capacity building:** A private company’s objective is to generate revenue and profits that can be used for growth and to pay for risk and investment. Companies often share similar development objectives as USAID, such as farmer technology adoption and revenue growth. Including Mission staff in partnership meetings and field visits provides opportunities to learn about the challenges that companies face while working in this market segment, and can help inform future programming, particularly policy discussions and initiatives at the Mission level. |

**Impact evaluations:** As partnerships close out, particularly with Mission buy-ins, impact evaluation data is an important tool for verification of results. Additionally, the program attempts to monitor the progress of closed partnerships to determine whether partners are continuing to scale. | **Include cost-benefit analysis and ex-post evaluation discussion in scopes of work:** It is recommended that programs include discussion about strategies and the cost and benefits of impact reporting on private sector partnerships. Additionally, it is recommended that USAID consider an approach to reserve resources for post-program monitoring of a sample of partnerships in order to evaluate the effectiveness of this approach to private sector engagement. |
## Appendix 1: Program Impact

**Required FTF Indicator 4.5.2-2**  
Number of hectares under improved technologies or management practices as a result of USG assistance

<table>
<thead>
<tr>
<th>Component #</th>
<th>Partnerships Reporting</th>
<th>FY 2013 Achieved</th>
<th>FY 2014 Achieved</th>
<th>FY 2015 Achieved</th>
<th>FY 2016 Achieved</th>
<th>FY 2017 Target</th>
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### Required FTF Indicator 4.5.2-5

Number of farmers and others who have applied new technologies or management practices as a result of USG assistance

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### Required FTF Indicator 4.5.2-38

Value of new private sector investment in the agriculture sector or food chain leveraged by FTF implementation (US$,000)

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### Required Custom Indicator

**Number of public private partnerships formed as a result of program assistance**

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<tr>
<td>Nigeria</td>
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<td>7</td>
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<td>13</td>
<td>0</td>
<td>13</td>
<td>0</td>
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<tr>
<td>LAC</td>
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<td>0</td>
<td>0</td>
<td>0</td>
<td>5</td>
<td>0</td>
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</table>

**Required Custom Indicator**

Number of technologies or management practices made available for transfer as a result of USG assistance.
### Required Custom Indicator

**Value of total private sector funding leveraged in the agriculture sector or food chain as a result of FTF assistance (US$,000)**

<table>
<thead>
<tr>
<th>Component #</th>
<th>Partnerships Reporting</th>
<th>FY 2013 Achieved</th>
<th>FY 2014 Achieved</th>
<th>FY 2015 Achieved</th>
<th>FY 2016 Achieved</th>
<th>FY 2017 Target</th>
<th>FY 2017 Achieved</th>
<th>FY 2018 Target</th>
<th>FY 2018 Achieved</th>
<th>LOP Target</th>
<th>Achieved To Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Technology Commercialization</td>
<td>Component 1</td>
<td>0</td>
<td>817</td>
<td>2,492</td>
<td>3,550</td>
<td>2,047</td>
<td>3,018</td>
<td>825</td>
<td>0</td>
<td>11,136</td>
<td>9,877</td>
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<tr>
<td>2. Partnership Development</td>
<td>Component 2</td>
<td>0</td>
<td>0</td>
<td>9,533</td>
<td>19,419</td>
<td>15,958</td>
<td>27,004</td>
<td>6,624</td>
<td>0</td>
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<td>55,956</td>
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<tr>
<td>Mozambique</td>
<td></td>
<td>0</td>
<td>0</td>
<td>8,850</td>
<td>12,147</td>
<td>4,934</td>
<td>4,870</td>
<td>301</td>
<td>0</td>
<td>22,494</td>
<td>25,866</td>
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<tr>
<td>Malawi</td>
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<td>0</td>
<td>0</td>
<td>350</td>
<td>1,181</td>
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<td>Guatemala</td>
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<td>0</td>
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<td>0</td>
<td>986</td>
<td>2,150</td>
<td>2,473</td>
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<td>4,986</td>
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<td>0</td>
<td>334</td>
<td>4,453</td>
<td>3,409</td>
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<td>9,029</td>
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<td>0</td>
<td>0</td>
<td>169</td>
<td>1,039</td>
<td>668</td>
<td>0</td>
<td>838</td>
<td>1,039</td>
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<tr>
<td>Nigeria</td>
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<td>0</td>
<td>0</td>
<td>0</td>
<td>652</td>
<td>3,572</td>
<td>13,188</td>
<td>2,566</td>
<td>0</td>
<td>6,138</td>
<td>13,840</td>
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<td>Zambia</td>
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<td>0</td>
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<td>1,183</td>
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<td>2,458</td>
<td>0</td>
<td>3,641</td>
<td>769</td>
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<td>LAC</td>
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<td>0</td>
<td>0</td>
<td>98</td>
<td>212</td>
<td>300</td>
<td>0</td>
<td>398</td>
<td>212</td>
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</table>

### Required Custom Indicator

**Number of investment designs/models identified**

<table>
<thead>
<tr>
<th>Component #</th>
<th>Partnerships Reporting</th>
<th>FY 2013 Achieved</th>
<th>FY 2014 Achieved</th>
<th>FY 2015 Achieved</th>
<th>FY 2016 Achieved</th>
<th>FY 2017 Target</th>
<th>FY 2017 Achieved</th>
<th>FY 2018 Target</th>
<th>FY 2018 Achieved</th>
<th>LOP Target</th>
<th>Achieved To Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>3. Investment Models and Case Studies</td>
<td>Project-Level</td>
<td>0</td>
<td>11</td>
<td>4</td>
<td>4</td>
<td>4</td>
<td>4</td>
<td>0</td>
<td>27</td>
<td>23</td>
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</table>
## Appendix II: Work Plan

<table>
<thead>
<tr>
<th>DESCRIPTION</th>
<th>TARGET</th>
<th>ACHIEVED</th>
<th>BALANCE</th>
<th>DELIVERABLE</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Technology Commercialization</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Round 5 (Postharvest Loss) Partnership Negotiation and Award</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Conduct due diligence and initiate negotiations via site visits</td>
<td>3</td>
<td>4</td>
<td>0</td>
<td>4 Round 5 due diligence site assessments conducted for Twiga Foods (Kenya), Promethean Power (Bangladesh), Store It Cold (Guatemala), and Mercy Corps Agrijoven (Guatemala)</td>
</tr>
<tr>
<td>Negotiate final milestones and award partnerships</td>
<td>3</td>
<td>4</td>
<td>0</td>
<td>4 Round 5 partnerships negotiated and awarded to Twiga Foods, Promethean Power, Store It Cold (expansion of existing award), and Mercy Corps Agrijoven (expansion of existing award)</td>
</tr>
<tr>
<td><strong>Ongoing Partnership Management</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Provide ongoing business and grant management assistance and capacity building support to partners</td>
<td>12</td>
<td>12</td>
<td>0</td>
<td>12 monthly check-ins to date per partner, including milestone status reports, progress updates, and success stories</td>
</tr>
<tr>
<td>Conduct monitoring visits</td>
<td>4</td>
<td>4</td>
<td>0</td>
<td>4 monitoring visits to Bangladesh October 2016 (The Metal), Honduras October 2016 (Zamorano), Guatemala October 2016 (Popoyan, Post Cosecha), Kenya November 2016 (AATF, MEA, Grameen Foundation)</td>
</tr>
<tr>
<td>PI-SMOG-01-08 AATF</td>
<td>435</td>
<td>411</td>
<td>24</td>
<td>411 MT StrigAway seed sold to 51,322 farmers</td>
</tr>
<tr>
<td>PI-SMOG-02-03 Mercy Corps</td>
<td>6</td>
<td>6</td>
<td>0</td>
<td>6 Farmforce subscriptions securing markets for 4,452 farmers</td>
</tr>
<tr>
<td>PI-SMOG-02-05 MEA</td>
<td>50</td>
<td>0.3</td>
<td>50</td>
<td>0.3 MT BIOFIX sold to 3,202 farmers in Kenya; partnership extended to FY2018, including updated sales expected in FY2018</td>
</tr>
<tr>
<td>PI-SMOG-03-01 Flow Equity</td>
<td>2,600</td>
<td>3,239</td>
<td>0</td>
<td>3,239 MT of improved poultry feed sold to 345,374 farmers in Ethiopia</td>
</tr>
<tr>
<td>PI-SMOG-03-02 Zamorano</td>
<td>9,000</td>
<td>10,404</td>
<td>0</td>
<td>10,404 doses of biologicals sold to 5,503 farmers in Honduras</td>
</tr>
<tr>
<td>PI-SMOG-04-01 Agri-Inputs</td>
<td>100,000</td>
<td>158,914</td>
<td>0</td>
<td>158,914 NITROFIX sachets sold to 25,426 farmers in Malawi</td>
</tr>
<tr>
<td>PI-SMOG-04-02 The Metal</td>
<td>45</td>
<td>96</td>
<td>0</td>
<td>96 reapers sold providing service to 4,161 farmers in Bangladesh</td>
</tr>
<tr>
<td>PI-SMOG-04-03 Grameen Foundation</td>
<td>3,500</td>
<td>10,846</td>
<td>0</td>
<td>10,846 Kilimo Booster ag loans made to 10,846 farmers in Kenya</td>
</tr>
<tr>
<td>PI-SMOG-04-04 Store It Cold</td>
<td>20</td>
<td>34</td>
<td>0</td>
<td>34 CoolBots sold impacting 43,560 farmers in Honduras; partnership renegotiated to include expansion into both Guatemala and Honduras markets, including updated sales expected in FY2018</td>
</tr>
<tr>
<td>PI-SMOG-04-05 Stewards Globe</td>
<td>300</td>
<td>635</td>
<td>0</td>
<td>635 MT improved seed varieties produced in Zambia impacting 63,549 farmers</td>
</tr>
<tr>
<td>PI-SMOG-05-01 Promethean Power</td>
<td>10</td>
<td>7</td>
<td>3</td>
<td>7 milk chillers impacting 280 farmers installed and operational</td>
</tr>
<tr>
<td>PI-SMOG-05-02 Twiga Foods</td>
<td>3,000</td>
<td>0</td>
<td>3,000</td>
<td>0 farmers selling produce through 10 collection centers; sales delayed due to civil unrest and expected in FY2018 Q1</td>
</tr>
<tr>
<td><strong>Ongoing Data Collection on Partnership Impact</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Submit semi-annual reports on progress against program indicators</td>
<td>2</td>
<td>2</td>
<td>0</td>
<td>1 annual report with progress against program indicators submitted to USAID on October 28, 2016; 1 semi-annual report with progress against program indicators submitted to USAID on April 27, 2017</td>
</tr>
<tr>
<td>Verify all data submitted for milestones with payments greater than $100K or final cumulative sales milestones</td>
<td>7</td>
<td>6</td>
<td>1</td>
<td>6 milestone verifications conducted (EthioChicken MS#7; Zamorano MS#6, 7; Grameen MS#6, 11; The Metal MS#8); note that AATF MS#54, 55 will not be paid and therefore milestone verifications will not be completed for those milestones, and AATF MS#56 has been moved to FY2018</td>
</tr>
<tr>
<td>2 Mission Partnerships</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>------------------------</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2.1 New Mission Partnership Negotiation and Award</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>2.1.1</strong> Negotiate final milestones and award partnerships on behalf of USAID/Zambia</td>
<td>5</td>
<td>4</td>
<td>1</td>
<td>4 USAID/Zambia partnerships negotiated and awarded to TechnoServe/COMACO, Amatheon, MRI Syngenta, and Good Nature (Zasaka); potential partner NCBA CLUSA was disqualified during due diligence</td>
</tr>
<tr>
<td><strong>2.1.2</strong> Conduct due diligence and initiate negotiations on behalf of USAID/LAC</td>
<td>2</td>
<td>3</td>
<td>0</td>
<td>3 USAID/LAC site visits for due diligence and initial negotiations to Solutions SA (Haiti), NSF International (Honduras), and Farmforce (Guatemala)</td>
</tr>
<tr>
<td><strong>2.1.3</strong> Negotiate final milestones and award partnerships on behalf of USAID/LAC</td>
<td>2</td>
<td>2</td>
<td>0</td>
<td>2 USAID/LAC partnerships negotiated and awarded to Solutions SA and Farmforce; potential partner NSF International was disqualified during due diligence</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>2.2 Ongoing Partnership Management</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>2.2.1</strong> Provide ongoing business and grant management assistance and capacity building support to partners</td>
</tr>
<tr>
<td><strong>2.2.2</strong> Conduct monitoring visits</td>
</tr>
</tbody>
</table>

| **2.2.3** PI-SMOG-MOZ-01-01 Opportunity International | 3,000 | 6,127 | 0 | 6,127 farmers accessing loans, savings, and mobile money |
| **2.2.4** PI-SMOG-MOZ-01-02 iDE | 6,560 | 7,844 | 0 | 7,844 farmers accessing technical assistance, inputs, and credit |
| **2.2.5** PI-SMOG-MOZ-01-03 NCBA CLUSA | 260 | 124 | 136 | 124 MT improved seed varieties sold to 17,509 farmers |
| **2.2.6** PI-SMOG-MOZ-01-04 EML | 7,050 | 44,397 | 0 | 44,397 farmers accessing hub storage and retail services |
| **2.2.7** PI-SMOG-MOZ-02-01 TECAP | 3 | 3 | 0 | 3 farmer house selling inputs, mechanization, and services accessible to 15,703 farmers |
| **2.2.8** PI-SMOG-MOZ-02-02 Txopela | 2,800 | 2,800 | 0 | 2,800 farmers accessing improved seed varieties |
| **2.2.9** PI-SMOG-MAL-01-01 Opportunity International Bank | 4,500 | 5,476 | 0 | 5,476 farmers accessing loans, savings, and mobile money |
| **2.2.10** PI-SMOG-MAL-01-02 Universal Industries | 6,900 | 7,037 | 0 | 7,037 farmers receiving improved vines or producing OFSP for value added products |
| **2.2.11** PI-SMOG-MAL-01-03 RAB Processors | 7,550 | 9,113 | 0 | 9,113 farmers selling or storing product in 3 SRAMs |
| **2.2.12** PI-SMOG-GUA-01-01 Popoyan | 1,500 | 0 | 1,500 | 0 farmers accessing beneficial biological pest control products; partnership renegotiated, including updated sales expected in FY2018 |
| **2.2.13** PI-SMOG-GUA-02-01 Mercy Corps | 500 | 433 | 67 | 433 farmers participating in youth savings and loan groups |
| **2.2.14** PI-SMOG-GUA-02-02 Post Cosecha | 35 | 63 | 0 | 63 seed outgrower entrepreneurs hired and trained |
| **2.2.15** PI-SMOG-UKR-01-01 ICF/Danone | 830 | 426 | 404 | 426 dairy farmers receiving training and selling milk to dairy coops |
| **2.2.16** PI-SMOG-UKR-01-02 Agrobonous | 890 | 892 | 0 | 892 farmers accessing soil testing and field mapping services |
| **2.2.17** PI-SMOG-UKR-01-03 Bayer | 6,000 | 6,102 | 0 | 6,102 farmers accessing 8 agro services |
| **2.2.18** PI-SMOG-UKR-01-04 Agrico | 1,250 | 2,828 | 0 | 2,828 MT improved potato seed sold to 341 farmers |
| **2.2.19** PI-SMOG-BEN-01-01 Tolaro | 1,500 | 1,509 | 0 | 1,509 farmers selling cashew nuts to Tolaro at a price premium |
| **2.2.20** PI-SMOG-NIGE-01-01 Babban Gona | 8,300 | 9,436 | 0 | 9,436 farmers accessing seeds, inputs, training, and credit through formal membership in trust groups |
| **2.2.21** PI-SMOG-NIGE-01-02 Hello Tractor | 150 | 153 | 0 | 153 smart tractor devices sold providing tractor services to 13,005 farmers through its mobile platform |
### 2.2.22 PI-SMOG-NIGE-01-03 Chi Farms
5 5 0 5 model fishery farms providing services to 500 farmers

### 2.2.23 PI-SMOG-NIGE-01-04 Niji Foods
750 753 0 753 women cassava farmers and peelers trained

### 2.2.24 PI-SMOG-ZAM-01-01 TechnoServe
3 3 0 3 market feasibility studies on poultry and other products

### 2.2.25 PI-SMOG-ZAM-01-02 Amatheon Agri
10 10 0 10 depots established and operational

### 2.2.26 PI-SMOG-ZAM-01-03 MRI Syngenta
20 20 0 20 seedling propagation nurseries established and operational

### 2.2.27 PI-SMOG-ZAM-01-04 Good Nature
1 0 1 1 foundation farm established and operational

### 2.2.28 PI-SMOG-LAC-01-01 Solutions SA
100 143 0 143 new farm business cells created for 4,218 farmers

### 2.2.29 PI-SMOG-LAC-01-02 Farmforce
1 1 0 1 outreach strategy completed

### 2.3 Ongoing Data Collection on Partnership Impact

#### 2.3.1 Submit semi-annual reports on progress against program indicators
2 2 0 1 annual report with progress against program indicators submitted to USAID on October 28, 2016; 1 semi-annual report with progress against program indicators submitted to USAID on April 27, 2017

#### 2.3.2 Verify all data submitted for milestones with payments greater than $100K or final cumulative sales milestones
23 22 1 22 milestone verifications conducted (BOM MS#9, 10, 11; iDE MS#13; NCBA CLUSA MS#8; ETG MS#14, 15, 16; Twpala MS#6; OIBM MS#9; 12; Universal MS#8, 11, 14; Rab Processors MS#7, 8; Popoyan MS#6, 8; Agric to MS#6; Agrobonus MS#13; Agrico MS#11; Babban Gona MS#6); note that NCBA CLUSA MS#9, 11, 12 will not be paid and therefore milestone verifications will not be completed for those milestones, and Popoyan MS#9, #10 has been moved to FY2018

### 3 Investment Models and Tools

#### 3.1 Customized Partner Acceleration Services
6 9 0 AATF (agrodealer training materials), Niji Foods (business development support), Agrico (potato marketing and distribution plan), Popoyan (EPA registration for biological control products), Twiga (business planning support), The Metal (business planning support), Solutions SA (business planning support), Hello Tractor (business planning support), AISL (business planning support)

#### 3.2 Cross-Partner Analysis, Resources, and Tools

##### 3.2.1 Coordinate and facilitate targeted, technically themed regional AgLab events
2 2 0 1 Metrics for Marketing event with 23 partners from Mozambique, Malawi, and Zambia hosted in Maputo, Mozambique in February 2017; 1 Biological Control Solutions event with 40 industry producers, distributors, buyers, and related technology providers hosted in Lake Atitlan, Guatemala in May 2017

##### 3.2.2 Develop new resources and tools based on cross-partner experiences for broad distribution to partners
2 2 0 1 program resource (in collaboration with SWFF) created on missing markets; 1 program resource created on taking innovations from research to market

##### 3.2.3 Develop a package of standard acceleration resources using existing consultant and farmer impact materials
1 0 1 package of consultant materials, surveys, and acceleration tools in progress; package components completed include partner pitch guides, marketing (STP) information, partner funding guides, and data system development and management resources

##### 3.2.4 Update S2S Guide materials to incorporate additional case studies of closing partnerships
4 5 0 5 case studies completed (Surehatch, Moana, EthioChicken, EMCL, Agrobonus)
## 4 Knowledge Management

### 4.1 Documenting Program Knowledge

#### 4.1.1 Document key internal processes and critical program knowledge through regularly facilitated team debriefs
- 1
- 0
- 1
- Summary document in progress; program components completed include key internal processes for subaward solicitation, SMOG development, partner management, and M&E data management

#### 4.1.2 Analyze current partner experience for business, management, or enabling environment lessons learned
- 1
- 0
- 1
- Summary document in progress; program components underway include IRC/CRC scoring and partner performance, partner exit interviews, partner feedback on subaward process

#### 4.1.3 Conduct robust partner exit interviews to identify best practices and lessons learned
- 15
- 11
- 4
- 11 exit interview conducted (Flow Equity, The Metal, Grameen, iDE, CLUSA, ETG, OIBM, RAB, Agrobonus, Bayer, Agrico); 6 partnerships extended to FY18 (AATF, BOM, Universal, Popoyan, AISL, Store It Cold)

### 4.2 Sharing Technical Lessons Learned

#### 4.2.1 Share key internal lessons learned on program implementation through AgCluster and AgTechXChange
- Ongoing documentation of key internal lessons learned (such as marketing poultry, commercialization for nutrition, and metrics for marketing) on the AgTechXChange, AgriLinks, etc.

#### 4.2.2 Host semi-annual brown bag events with USAID/MPI to share lessons learned and coordinate with other USAID programs
- 2
- 2
- 0
- 2 USAID brown bag events on January 24 (program introduction), March 22 (Hello Tractor impact and market data); tech talks on partnership development and partnership development postponed to FY2018

#### 4.2.3 Host quarterly tech talks on lessons from commercializing ag technology and developing mission partnerships
- 4
- 5
- 0
- 5 tech talk events on November 29 (AISL), March 29 (Tolaro), June 6 (Metrics for Marketing), June 21 (Segmentation, Targeting, Promotion), and September 7 (Biological Control Solutions)

### 4.3 Engaging AgTechXChange Community

#### 4.3.1 Curate Learn! page with bi-weekly commercialization blogs, guest authors, and new resource listings
- 24
- 24
- 0
- 22 blogs authored by staff, partners, guests on sector topics such as market segmentation, last mile marketing, understanding funding opportunities, and good practices for partnering with USAID

#### 4.3.2 Curate Connect! page with online chats discussing success stories and lessons learned in ag tech commercialization
- 2
- 2
- 0
- 2 online chats on partner lessons learned, interesting resources, and upcoming events

#### 4.3.3 Curate Grow! page with new funding opportunities for ag technology commercialization
- 24
- 24
- 0
- 17 funding opportunities posted by program staff such as USAID’s Southern Africa Trade and Investment Hub and the Data Driven Farming Prize; 6 funding opportunities posted by ATX community members

#### 4.3.4 Develop new approaches for facilitating knowledge transfer between private sector actors through ATX
- 10
- 3
- 7
- 3 strategic partnerships formed through ATX

## 5 Program Impact and Reporting

### 5.1 Program Impact

#### 5.1.1 Collect sales data and other business metrics to ensure partner progress against targets
- Ongoing submission of sales and training data from partner milestones, milestone verifications, and farmer impact surveys

#### 5.1.2 Verify all data submitted for milestones with payments greater than $100K or final cumulative sales milestones
- 30
- 28
- 2
- 28 milestone verifications conducted (EthioChicken MS#7; Zamorano MS#6, 7; Grameen MS#6, 11; The Metal MS#8; BOM MS#9, 10, 11; iDE MS#13; NCBA CLUSA MS#8; ETG MS#14, 15, 16; Teroxela MS#8; OIBM MS#9, 12; Universal MS#8, 11, 14; Rab Processors MS#7, 8; Popoyan MS#6, 8; AgriJoven MS#6; Agrobonus MS#13; Agrico MS#11; Babban Gona MS#6); note that AATF MS#54, 55 and NCBA CLUSA MS#9, 11, 12 will not be paid and therefore milestone verifications will not be completed for those milestones

#### 5.1.3 Conduct farmer-level impact surveys for select partners to confirm sales to farmers and impact on women
- 10
- 10
- 0
- 10 farmer impact surveys conducted (BOM, iDE, NCBA CLUSA, ETG, Teroxela, Grameen, MEA, AISL, Rab Processors, Farmforce)

### 5.2 Progress Reporting

#### 5.2.1 Submit semi-annual reports on progress against program indicators
- 2
- 2
- 0
- 1 annual report with progress against program indicators submitted to USAID on October 28, 2016; 1 semi-annual report with progress against program indicators submitted to USAID on April 27, 2017

#### 5.2.2 Submit quarterly financial and accrual reports
- 4
- 4
- 0
Appendix III: Photo Captions

All photos are by Fintrac Inc. except Rana Labs, page 23, Popoyán, page 24, and Hello Tractor, page 44.

Cover photo: Sociedade Beneficiamento Sementes’ (SBS) new seed processing plant is helping expand smallholder access to certified legume seed. Please contact jholbrook@fintrac.com if a caption is needed for a photo use not related to Feed the Future Partnering for Innovation.

Page 7: StrigAway seed combats the invasive Striga weed in East Africa.

Page 8: In Zambia, Agro-Input Suppliers Limited is producing and marketing Nitrofix, a legume inoculant that boosts legumes’ natural nitrogen fixation.

Page 9: EthioChicken is selling improved poultry breeds that grow faster and produce more eggs than local breeds in Ethiopia.

Page 10: One of Musoni’s wealth creation officers talks to a farmer about his Kilimo Booster agricultural loan in Kenya.

Page 11: In Kenya, MEA is commercializing BIOFIX, a legume inoculant that boosts legumes’ natural nitrogen fixation.

Page 12: The Metal is expanding access to reaper services in Bangladesh by training entrepreneurs on maintaining and using small-scale reapers like this one.

Page 13: Promethean Power Systems is introducing small-scale milk chillers to Bangladesh, providing access to affordable, off-grid cold storage.

Page 14: Stewards Globe is building the market for legume seed in Malawi by expanding its outgrower scheme and promoting new seed varieties.

Page 15: Store It Cold is introducing its affordable cold storage technology, the CoolBot, in Honduras and Guatemala.

Page 16: Twiga Foods is strengthening linkages between urban produce vendors and rural farmers in Kenya, including developing aggregation depots like this one.

Page 17: Zamorano University is scaling up its production of beneficial nematodes, a biological pest control product, in Honduras.

Page 21: Tolaro Global is developing one of Benin’s first cashew processing and packaging plants and helping farmers become Fairtrade and organic certified.

Page 23: Mercy Corps and its partners are expanding and strengthening youth savings and loan groups in the Western Highlands of Guatemala.

Page 24: In Guatemala, Popoyán is promoting the use of biological pest control products that are more effective and less expensive than chemical pesticides.

Page 25: Servicios de Post-Cosecha is improving access to improved potato seed in Guatemala.

Page 27: Farmforce software provides full traceability to the farm level, enabling exporters to comply with international traceability requirements.
Page 28: Solutions SA is formalizing the mango supply chain in Haiti by organizing producer groups and introducing electronic traceability software.

Page 30: Opportunity International Bank Malawi is providing farmers with banking services and training in good agricultural practices and financial literacy.

Page 31: Rab Processors’ storage and marketing facilities use a warehouse receipts system to provide storage for smallholder farmers.

Page 32: Universal Industries in Malawi is building the market for value-added orange-fleshed sweet potato products such as potato chips and bread.

Page 35: Josefina is one of the entrepreneurs that runs Export Marketing Group Limited’s input supply shops at its agricultural hubs in rural Mozambique.

Page 36: Seed producers in Mozambique face many challenges, but Lusosem is developing innovative distribution and sales strategies.

Page 37: Seed producers in Mozambique face many challenges, but Phoenix Seeds and Oruwera are developing innovative distribution and sales strategies.

Page 38: In Mozambique, Opportunity International is expanding smallholder farmers’ access to loans and banking services.

Page 39: TECAP’s farmer houses provide access to agricultural inputs and mechanization services in underserved areas of Mozambique.

Page 40: Txopela is expanding the supply of improved seed for smallholder farmers in Mozambique.

Page 42: Babban Gona supports farmer cooperatives in Nigeria with management services, input purchasing, and loans.

Page 43: Chi Farms is providing quality inputs for small-scale fish farmers in Nigeria, including producing catfish fingerlings such as these.

Page 44: Hello Tractor’s innovative Smart Tractor technology is expanding smallholder farmers’ access to mechanization services in Nigeria.

Page 45: Niji Foods is processing cassava peels into feed mash, turning this previously wasted product into an income source.

Page 47: Agrico is expanding its potato seed processing and storage in Ukraine.

Page 49: Agrobonus is providing soil testing services to small-scale farmers in Ukraine.

Page 50: Bayer is helping its customers more effectively use its products by developing training packages of improved agribusiness practices.

Page 51: ICF CW is expanding family milk farms by providing modern equipment and training to small dairy farmers in Ukraine.

Page 53: Amatheon Agri is expanding its outgrower scheme in Zambia.

Page 54: Good Nature Agro Products is expanding its outgrower scheme for legume production in Zambia.

Page 55: MRI-Syngenta is setting up new seedling production and propagation facilities.

Page 57: Honey is one of the products that smallholder farmers in Zambia produce for COMACO’s “It’s Wild” brand.