

FEED THE FUTURE

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



Feed the Future Mozambique Agricultural Innovations Activity (FTF Inova)

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Acronyms

AIPM	<i>Agro-Imbeu Parque e Máquinas</i>
ACIANA	<i>Associação Comercial e Industrial e Agrícola de Nampula</i>
APROSE	Association for Promotion of the Seed Sector
ASTRA	<i>Associação dos Transportadores Rodoviários Nampula</i>
BCI	<i>Banco Comercial e de Investimentos</i>
BII	Business Model Innovation Index
BRC	British Retail Consortium
CdA	<i>Casa do Agricultor</i>
CDM	<i>Cervejas de Moçambique</i>
CLA	collaborating, learning, and adapting
CRF	community radio forum
CRM	customer relationship management
FAO	Food and Agriculture Organization of the United Nations
FTF	Feed the Future
FTF Inova	Feed the Future Mozambique Agricultural Innovations Activity
FTF RAMA-Nacala	Feed the Future Mozambique Resilient Agricultural Markets Activity Nacala Corridor
FY	fiscal year
ha	hectare
HEI	higher education institution
ICT	information and communications technology
ISPM	<i>Instituto Superior Politecnico de Manica</i>
K2	Klein Karoo
MEL	monitoring, evaluation, and learning
MeTL	Mohammed enterprises Tanzania Limited
MOU	memorandum of understanding
MSD	market systems development
MZN	meticais (currency)
NGO	non-governmental organization
Q	quarter
Radio SIRT	<i>Sistema de Radio e Televisão</i>
SHF	smallholder farmer
STTA	short-term technical assistance
UBS	<i>Universidade do Lurio Business School</i>
UCM	<i>Universidade Catolica de Moçambique</i>

USAID	United States Agency for International Development
USD	United States Dollar (currency)
USG	United States Government
USSD	unstructured supplementary service data
VBA	village-based agents
WEE	women economic empowerment

Executive Summary

The Feed the Future Mozambique Agricultural Innovations Activity (FTF Inova) made good progress on its interventions during quarter (Q) 2 of fiscal year (FY) 2019, facilitating the introduction and adaptation of a number of innovations with an increasing portfolio of partners. Testing of established probes continued, accompanied by the first set of learning, while new probes also emerged. Consistent with the adaptive learning approach, the team captured the learning and quickly used it to inform management and decision-making processes, demonstrating the project's capacity to quickly assess progress, learn, and iterate.

After several months of testing, FTF Inova gained a deeper understanding of the challenges faced by input distribution firms, as well as the weaknesses within the supporting services for the Input Distribution Network System. One area of advancement was in efforts to test last mile distribution systems. *Casa do Agricultor* (CdA) continued to demonstrate its commitment to building a viable last mile input distribution system this quarter, resulting in key learning and data that can be used to improve the efficiency of the distribution model and design a reward system for retail points. FTF Inova also worked with retailers and wholesalers (Klein Karoo (K2), Luteari, and two agrodealers) to pilot the innovative village-based agent (VBA) networks, recruiting community-chosen agents to gather orders, build volumes, and broker trust and advantageous purchasing conditions. Next quarter, FTF Inova will further build on this experience by piloting a distribution solution with a new partner, Mutiana Commercial, looking to establish mobile and container shops in rural areas.

Further, FTF Inova continued working with wholesalers to establish feedback loops on the quality and image of their products. Phoenix Seeds tested the use of radios to gather feedback, and K2 established a customer relationship management (CRM) system. Further, work started this quarter with *Agro-Imbeu Parque e Máquinas* (AIPM) to design customer-centric seeds by familiarizing potential customers with the product. FTF Inova re-engaged in discussions with Yara International to develop a foundational market strategy to grow its sales and distribution; this partnership is expected to start in the next quarter.

FTF Inova also gained traction this quarter in the Supply Chain Management System portfolio, focusing and identifying the emerging structure and key entry points for innovation across agricultural products and players throughout the supply chain. In an effort to improve access to higher-end export markets, FTF Inova continued to support Condor Nuts, a cashew processor, as it identifies a suitable traceability system to transform its production lines as part of its pursuit to obtain the British Retail Consortium (BRC) Food Safety Certification, a certification that will provide access to premium markets in Europe and the United States. FTF Inova is also negotiating a Deal Note with Mozambique Good Trade, a domestic trading company distributing high-quality products, to better understand the domestic consumer market and establish feedback mechanisms with customers, ultimately increasing access to and the value of locally-grown and processed products. FTF Inova continued discussions with Novo Madal and *Miruku* to design innovations in performance-based incentive schemes that foster loyalty among the best performing farmers, thus generating a reliable supply of quality products. FTF Inova is also in discussions with Mohammed enterprises Tanzania Limited (MeTL) to test performance-based production schemes that incentivize small-scale aggregators to establish long-term relationships with smallholder farmers (SHFs).

These engagements are helping FTF Inova better understand the many challenges faced by processors and exporters relative to the offtake market and supply model of their choice. But they also give further insight into how the market boundaries can be gradually expanded to make the market more inclusive and the nature of the services required to support companies in taking up business opportunities. This information opens up new entry points for FTF Inova to bring real systemic change. As FTF Inova continues learning during Q3, the Supply Chain Management System portfolio will focus increasing attention on how to engage with partners at various points of this key market function. To this extent, FTF Inova will put more effort into recruiting partners that operate in the domestic market and want to increase the value they bring to end

market consumers (i.e., large distributors like Shoprite), as well as finding leverage points to enhance the capacity of market sector actors to adopt quality standards like the BRC.

Work in the supporting functions—the Interconnected Systems, Support Service System, and Business Service System portfolios—has not yet achieved the same level of depth as the Input Distribution Network System and the Supply Chain Management System, but remained focused on probing the viability of services that can spur further innovation. The Interconnected Systems portfolio made moderate progress during the quarter in supporting radio stations as they established sustainable programs that provide a feedback mechanism between SHFs and input and trading companies, as seen in the pilots between *Sistema de Radio e Televisão* (Radio SIRT) and Phoenix Seeds, and Olam with Radio Ribau. The academia function in the same portfolio made some progress in adapting the internship program to the needs of the private sector by providing the internship coordinators at two higher education institutions (HEIs)—*Universidade do Lurio* Business School (UBS) and *Universidade Católica de Mocambique* (UCM)—with tools and templates that introduce students to customer-centric services, customer database management, marketing innovations, and expansion tactics, allowing interns to support agribusinesses in efforts to reach the last mile.

In the Support Service System portfolio, notable progress was made with the probe on professional spraying services for cotton, and with defining innovations and probes in mechanization services. The professional spraying services pilot with *Isolmoc*, Bayer, and Olam is currently being rolled out, and has thus far been well-received by SHFs despite some challenges that will require adjustments and adaptations as the pilot moves forward. FTF Inova is also working with *Ngala Investimentos* to upscale this probe to crops beyond cotton. At the same time, FTF Inova and *Prodeca Sarl* defined several innovations for testing, including the extension and expansion of the range of mechanization services offered to SHFs; implementation will start in the next quarter. Moreover, FTF Inova’s facilitation of a stakeholder dialogue provided logistics service providers and users with a venue to meet and gather feedback on issues related to the quality and availability of logistics services, progressing efforts to better align these services to the needs in rural areas.

Finally, in the Business Service System portfolio, completion of an information and communications technology (ICT) market assessment and work plan this quarter resulted in a clear strategic approach on how to support business linkages between ICT service providers and the agriculture sector, and adapt existing ICT products to the agriculture sector’s needs. The marketing function also made progress in discussing agreements with Tangerine and Forcier (two marketing companies) to market their services to the agricultural sector. Discussions about a partnership with Hollard Agri testing the feasibility of weather index insurance were put on hold as FTF Inova conducts a risk evaluation to determine the level of investment to make in the partnership.

Overall, activities this quarter demonstrate the increased breadth and depth of the portfolio, making an impact on the visibility and leverage FTF Inova has in the market. Having developed a good track record, the project now finds itself much better positioned to negotiate deals, and nudge partners with more ambitious innovations. In addition, as clear patterns and opportunities for innovation emerge in the market, FTF Inova’s capacity to add value to partners and make compelling offers improves. As a result of the work done so far, FTF Inova finds itself well-positioned to continue fostering changes that are supported by the real commitment of a number of key market players. As the project identifies clear synergies across its portfolio of partnerships, it also becomes more capable of coaxing partners to adopt new ways of working with each other, based on shared value, innovation and on expanding market services and outreach to be more inclusive of SHFs.

I Technical Activities

Key progress on technical activities is reported under each area of the agricultural market system: Input Distribution Network System, Supply Chain Management System, Interconnected Systems, Support Service System, and Business Service System. The chapter concludes with an update on the partnership pipeline.

I.1 Input Distribution Network System

I.1.1 Description of Activity, Achievements, and Progress

In Q2, the Input Distribution Network System continued to thrive as FTF Inova's most advanced portfolio. FTF Inova's relationships with its existing partners are maturing. FTF Inova has grown the number of pilots testing the expansion of distribution channels into the last mile—for example, a VBA model with K2, Luteari, and two agrodealers and a pull distribution model with CdA—in an effort to drive demand and create customer loyalty in rural areas. FTF Inova will further expand upon its probes related to the VBA innovation in Nampula by engaging *Miruku*, a local agro-processing company, as well as some of CdA's high performing agrodealers. In several of the VBA pilots, partners are leveraging community-based agents to develop a better understanding of target customers, and initiating tools such as customer databases to track customer preferences. Partners are also working interactively with marketing firms and community radios to identify and test customer-centric marketing tactics. Throughout the quarter, several input firms were able to utilize interns to support the implementation of these innovations. Activities this quarter were largely in line with the FY 2019 annual work plan, with no significant delays.

Into next quarter, FTF Inova will sign a partnership agreement with Yara International, a fertilizer manufacturer, to design pre- and post-growing season marketing aimed to grow Yara International's fertilizer sales and distribution to SHFs. FTF Inova will also continue testing innovations in last mile distribution, customer segmentation, and promoting gender-sensitive customer-oriented promotional events. In addition, FTF Inova will participate in discussions on Cyclone Idai recovery, specifically regarding government and non-governmental organization (NGO) sponsored seed distribution to SHFs in affected areas, to identify and mitigate distortions that may occur in the input market during the coming season.

AIPM, Deal Note #1. AIPM, a seed company located in Tete province, is continuing efforts to launch a new seed brand targeting the SHF market and exploring customer-centric business practices to increase its value proposition. AIPM has finalized a contract with Tangerine, a marketing company specializing in brand development, and held a kick-off meeting. By the end of the next quarter, Tangerine is expected to have created a new brand for AIPM's maize seed that matches the expectations of the SHF target market, a major step in developing a customer-centric marketing strategy. Tangerine will start to gather customer information in four districts—Angonia, Tsangano, Macanga, and Gorongosa—in mid-April. The brand is expected to be launched in the next farming season. AIPM's activities continue to progress according to the timeline established in the FY 2019 annual work plan.

CdA, Deal Note #2. CdA, an agricultural input firm, remained committed this quarter to investing in a last mile distribution system, a pull strategy focused on building its last mile customer base and loyalty and shifting its distribution to better incorporate SHFs. During the quarter, CdA used its own truck to continue to pilot three routes in Chimoio that it began testing in Q1 to determine each route's viability, gain a better understanding of the distribution dynamics, and explore the use of non-traditional retail shops—petrol stations, grocery shops—as additional drop points to make the routes sustainable. In assessing these routes, CdA found that the weekly deliveries were well-received, although CdA only received one pre-order. While limited, this evidence showed that the system can work if it is well communicated and executed. Nonetheless, agrodealers showed some reluctance in accepting the new business model, which operates on a commission basis rather than on earning margins from price markups, and kept prices of inputs to SHFs high despite the direct delivery of the products. CdA continues to improve the model's efficiency through the collection of

customer-centric data. In the next quarter, CdA is expected to procure route management software that will support its efforts to test and evaluate routes reaching further into the last mile.

In addition, in an effort to adopt more customer-centric practices, CdA is working with Tangerine to remodel its shops and review its marketing materials. Tangerine will submit a final report on its recommended marketing tactics in the next quarter. In Q3, FTF Inova will initiate procurement of a CRM system, a platform that CdA will use to gather customer information and track customer loyalty. According to the FY 2019 annual work plan, CdA's activities are in line with the proposed timeline.

K2, Deal Note #2. Under the second Deal Note, K2, a seed company, is primarily focused on the developing a VBA system that leverages community agents to make its products more widely available to rural consumers, particularly SHFs. K2 launched its VBA model this quarter by tapping into community preferences to select 15 agents to serve in districts of Catandica (Chindengue, Nhacangale) and Manica (Messica, Machipanda). K2 is targeting opportunities to recruit female agents, when possible. The VBA model focuses on pull distribution, allowing agents to deliver products to customers on demand rather than relying on an inventory system. Agents operate on a commission basis, incentivizing them to develop community relationships and provide timely delivery and good customer service. K2 has utilized two interns to support the development of the VBA model. The interns have also assisted in populating K2's CRM system launched last quarter.

K2 is also in the process of evaluating marketing companies that can assist with efforts to build on its direct marketing tactics and organize gender-sensitive, customer-oriented promotional events. As the selected company will likely commence its efforts next quarter, marketing events will target the main agricultural season. This partnership is generally on track with the FY 2019 annual work plan, although data collection and planning for gender sensitive, customer-oriented promotional events is pending the selection of the marketing firm.

Luteari, Deal Note #1. FTF Inova extended its Deal Note with Luteari, a small input firm, to establish a VBA model that targets farmers in the last mile and build a customer database to track customer preferences. Establishing community agent networks provides Luteari a mechanism to further expand its customer base while also providing a better understanding of customer needs. Luteari's Director, Celia Ribeiro, expressed her satisfaction and confidence in the VBA model. In addition, she acknowledged the need to continue the pilot so that people acclimate to the model, especially considering that farmers and agents have long been accustomed to receiving free seeds from the government or NGOs, and therefore are not used to having a relationship with input suppliers.

“I have no doubts that (the VBA) model will work”

--Celia Ribeiro, Director of Luteari

Nonetheless, the Ms. Ribeiro expressed a major concern that farmers' financial constraints create barriers to buying inputs—farmers can either buy improved seeds or fertilizer, but rarely buy the complete kit that can deliver better results. Consequently, farmers do not see the value of investing in improved inputs; financing is crucial to both Luteari and the farmers. In order to address this constraint, under the Deal Note, FTF Inova will test payment methods, such as check-off systems and pre-payments, to gauge farmers' willingness to participate in different financing schemes. To implement this activity, Luteari will need financing options for SHFs, as well as increased capacity to deliver products to farmers once financing is accessible.

Luteari is using the support of two interns to implement its activities—supporting both the community agent network activity and visiting and gathering information from each agent's customers that will be fed into a

customer database for Luteari. Since the effects of Cyclone Idai delayed the placement of interns with Luteari (while also affecting some of Luteari’s technicians who were a part of the VBA pilot), the interns will continue working with Luteari through the next quarter. Luteari is also looking for opportunities to engage women and farmer organizations. The company is on schedule with efforts to develop a last mile distribution system with its interns, as outlined in the FY 2019 work plan. Development of a customer database is delayed pending software acquisition.

Input agrodealers, memorandum of understanding (MOUs). Similar to efforts with CdA, K2, and Luteari, FTF Inova signed an MOU with two agrodealers—Cantina 2001 and *Kubatsirana Comercial Lda*—to test a last mile distribution system by establishing a VBA network using community agents to extend the retail network further into the last mile. An intern was contracted to support the pilot. In an initial meeting with Cantina 2001, ten agents, two of which were women, participated. Some of the agents had experience working as agents, but under a different model (selling credit rather than taking pre-orders from farmers).

Activities with Cantina 2001 were delayed due to Cyclone Idai, which impacted the infrastructure between Sussundenga District and Munhinga, where the agrodealer is based. Access has since been reestablished, and activities will resume in the next quarter. FTF Inova has not yet met with *Kubatsirana Comercial* as Cyclone Idai also prevented access to Mussorize where the company is based. While the partnership achieved some of the activities outlined in the FY 2019 annual work plan, several have been delayed until Q3.

Phoenix Seeds, Deal Note #1. Phoenix Seeds, a processing, packaging, and marketing company, completed its radio program pilot started in Q1 to market its seeds, increase brand awareness to customers, and gather customer feedback during the program. Phoenix Seeds was pleased with the pilot and keen to continue the radio programming. Additionally, the company expressed interest in setting up a customer service center. Nonetheless, Phoenix Seeds has neither made an effort to establish the customer service center nor prepared a plan to build on the relationships it developed with farmers during the radio program pilot. In a meeting with FTF Inova, Phoenix Seeds reiterated its interest in the radio programs, but noted it faced financial constraints that it was attempting to address in order to continue the activity. FTF Inova’s monitoring, evaluation, and learning (MEL) team is preparing a quick assessment to evaluate the radio program, which includes interviewing Phoenix Seeds staff, radio personnel, and customers. FTF Inova will share the findings with Phoenix Seeds, and discuss options for moving the activities forward. As activities with Phoenix Seeds are on hold until the results from the quick assessment are available, the activities are delayed from the FY 2019 annual work plan schedule.

Yara International, imminent partnership. This quarter, FTF Inova re-engaged with Yara International, a chemical manufacturing company, to develop a two-season marketing strategy aimed at growing Yara’ International’s sales and fertilizer distribution. The strategy will focus on promotional events to increase sales and loyalty in the pre-growing season. In the post-growing season, Yara International will conduct testimonial advertising and events using farmers as advocates, and will select farmers and retailers to participate in loyalty clubs. Yara International’s operations, particularly its logistics surrounding fertilizer distribution, were negatively affected by Cyclone Idai, resulting in a lag in supplying local and regional clients. Formalization of the partnership and any activities outlined in the final partnership agreement will be pushed into Q3, which generally aligns with the FY 2019 annual work plan schedule.

1.1.2 Key Challenges and Lessons Learned

- Most input suppliers, especially small- and medium-sized enterprises, continue to face challenges in collecting customer data. This is not only due to a lack of suitable and affordable ICT solutions, but also a lack of perceived value and dedicated personnel to implement the ICT solutions. FTF Inova has supported its partners with interns to gather customer data, and senior advisors to assist firms in understanding the value of using data to inform key business decisions. The work that FTF Inova is doing in the ICT space—helping local ICT companies customize their services to the agricultural sector—will also help increase the adoption of evidence-based management solutions.

- CdA's catalog distribution model, which uses non-traditional retail points, such as petrol stations and hair salons, as drop points may require a license to sell agricultural inputs at these locations. This issue may not apply if the CdA directly issues the invoice and the retail point effectively serves as a post office box. Possible solutions will be investigated in the next quarter.

1.1.3 Next Steps

- Focus building CdA's distribution routes in three main areas: 1) systematize the operation of and data collection along the routes; 2) better articulate the business offer to agrodealers; and 3) improve communication between FTF Inova, CdA's regional managers and field staff.
- Focus additional efforts on alliance building among market actors as a business strategy that improves the operational and cost efficiency of distributions to the last mile.
- Leverage radio programs, community agents, and testimonials to boost demand and improve distribution efficiency through pre-orders and cash-based transaction models.
- Utilize interns to help input firms set up customer databases and create a system to respond to customer feedback in a timely manner; interns can also help input firms set-up community agent network models to expand distribution.
- Work with input firms, such as Phoenix, K2, and Yara International to track farmers' use of their inputs and leverage farmer feedback for testimonial events in the next buying season.
- Build capacity within input firms that enable the firms to identify opportunities to further expand their last mile distribution strategies (to other regions or to their high-performing networks).

1.2 Supply Chain Management System

1.2.1 Description of Activity, Achievements, and Progress

The Supply Chain Management System portfolio made progress this quarter as it continued to develop partnerships that test innovations reaching deeper into the supply chain, from suppliers to end buyers. FTF Inova continues to support Condor Nuts in acquiring BRC certification needed to access higher-value markets for cashew. FTF Inova is also engaging with Mozambique Good Trade to increase the value of locally grown and processed products by targeting niche end markets through marketing and branding improvements. Ongoing discussions with Novo Madal and *Miruku* have helped FTF Inova fine tune innovations in performance-based incentive schemes to instill loyalty among the best suppliers. Similarly, FTF Inova has engaged with MeTL to test incentives for aggregators in the supply chain. To further facilitate alliances in this portfolio, FTF Inova held a stakeholder dialogue for supply chain market actors, providing a venue for actors to network and discuss challenges and potential solutions to mutual problems. In Q3, FTF Inova will look to expand the depth of these partnerships while also strategically expanding the breadth of the innovations being tested at various points in the supply chain, with an eye to expanding partnerships with traders, distributors and wholesalers and further understanding aggregators across the different value chains.

While some activities have progressed on schedule with the FY 2019 annual work plan, this portfolio has experienced some delays in finalizing partnerships and thus, implementing activities. Nonetheless, some partners have independently commenced implementation of various innovations despite not having a signed partnership agreement. In Q3, FTF Inova will focus on finalizing partnership agreements with Novo Madal, *Miruku*, MeTL and Mozambique Good Trade to further test performance-based incentives and innovations targeting niche end markets. In addition, FTF Inova will identify pain points in the supply chain that may inform potential value-add solutions to probe.

Condor Nuts, Deal Note #1. In Q2, Condor Nuts, a cashew processor, made significant progress in pursuit of the BRC Food Safety Certification, a Global Food Safety Initiative certification that can provide access to premium end markets, and increase demand. As part of the certification, Condor Nuts is in the process of evaluating procurement proposals for an ICT-based traceability system. Out of 14 proposals reviewed, three

vendors met the technical and cost evaluation criteria, albeit at a high price point. Consequently, Condor Nuts requested that the three vendors present a further cost breakdown to aid the negotiation and selection process. A final vendor is expected to be selected next quarter after a second review of the eligible proposals and streamlining the technical approach to reduce costs while still delivering on compulsory features and high functionality.

To ensure Condor Nuts fulfills all the requirements for BRC certification, FTF Inova initiated the recruitment of a consultant. Specifically, the consultant will help Condor Nuts address recommendations from a pre-assessment report, including solutions for critical areas of non-conformity (such as developing a preventive action plan based on a root cause analysis) as well as conduct a mock audit of BRC certification requirements. In addition, the consultant will conduct a training of trainers with Condor Nuts' staff on BRC certification requirements to build sustainable expertise and capacity in the area. Into the next quarter, Condor Nuts will continue strategizing how to engage farmers in providing quality inputs per the BRC certification process. This activity is generally proceeding in accordance with the timeline outlined in the FY 2019 annual work plan.

Novo Madal, MOU. FTF Inova is finalizing negotiations with Novo Madal, a local company operating since 1877, to develop a performance-based in-grower program involving SHFs that: 1) defines a transparent reward mechanism to incentivize farmers to increase productivity; 2) creates feedback groups, composed of male and female farmers, to resolve disputes arising from managing the incentive program; and 3) introduces a platform to share information on market prices and market demand with farmers participating in Novo Madal's in-grower scheme. Activities will commence once the Deal Note is finalized in the next quarter.

During Q2, FTF Inova conducted a rapid gender assessment (see Section 5 for details) to better understand the barriers to and opportunities for female participation in performance suppliers' clubs and out-grower schemes. Novo Madal participated in the assessment, as did farmers in the Licuari community who will participate in Novo Madal's performance suppliers' clubs for producing castor beans. The assessment showed that low levels of literacy and customary barriers that inhibit women from signing contracts may present challenges. Given these findings, Novo Madal will need to adjust its scheme; for example, FTF Inova can support Novo Madal in translating the contract into local languages and developing a contract using visuals so that a variety of parties can understand it. In addition, FTF Inova will assist Novo Madal in providing expertise in resolving disputes and developing a communication strategy to engage farmers using community radios, billboards, and mobile messages. Activities for this partnership are on schedule according to the FY 2019 annual work plan.

Miruku Agro-Indústria, imminent partnership. In Q2, FTF Inova continued discussions with *Miruku Agro-Indústria*, an agro-processing company in Nampula, to establish a partnership agreement that addresses *Miruku's* need for a reliable supply of maize and soya beans to meet the requirements of *Miruku Coop's* processing plant. The partnership will establish a formalized performance rewards program for maize and soya bean farmers in the provinces of Nampula (Meconta) and Zambezia (Alto Molocue) with transparent performance criteria and clearly-defined incentives. Specifically, *Miruku* will establish and test performance supplier clubs (targeting 200 of the 2,000 farmers they work with), and design transparent incentives for loyalty, quality, and standards. This will allow *Miruku* to identify the best suppliers and strengthen and invest in relationships with these suppliers. To implement this innovation, *Miruku* will hold workshops with farmer association leaders and representatives, educating them on suppliers' clubs. In addition, *Miruku* will elicit feedback from the leaders on model supplier behavior to inform the selection criteria for suppliers' clubs. FTF Inova will also assist *Miruku* in implementing an ICT system to manage suppliers' clubs and track products. As part of its strategy, *Miruku* will examine how to drive demand by marketing to its end customers.

FTF Inova also involved *Miruku* in the rapid gender assessment (see Section 5 for details), resulting in *Miruku* linking female savings group members to input companies to facilitate women's access to inputs. Full implementation of the partnership is expected to start in April 2019. While *Miruku* has commenced some of

its activities this quarter, finalization of the partnership agreement has been delayed relative to the schedule outlined in the FY 2019 annual work plan.

MeTL, notable prospective partnership. FTF Inova is working with MeTL to form a partnership probing performance-based production schemes involving SHFs, particularly female SHFs. The performance management tactics that will be tested include establishing incentives for traders (aggregators) that can lead to long-term SHF relationships, as well as incentives for production, both in volume and quality to ensure MeTL is operating at full capacity. A Deal Note is currently being negotiated, and activities are expected to begin in the next quarter. As such, the partnership with MeTL is delayed relative to the FY 2019 annual work plan.

Mozambique Good Trade, imminent partnership. FTF Inova is finalizing a Deal Note with Mozambique Good Trade, a trading company that distributes high-quality products to the domestic market. Activities under this agreement include marketing and branding improvements at end markets, particularly around niche markets, that will result in an increased value of locally-grown and processed products. FTF Inova is working with Mozambique Good Trade to prioritize distribution of “grown in Mozambique” products, for which there is an inherent value in the domestic market. Mozambique Good Trade has currently identified microprocessors that meet quality and quantity specifications. Finalization of the Deal Note is still being negotiated, but activities are expected to begin early next quarter.

Supply Chain Stakeholder Dialogue. In March, FTF Inova held the first stakeholder dialogue on supply chain, hosted by the *Associação Comercial e Industrial e Agrícola de Nampula* (ACIANA). The event highlighted opportunities for aggregation, improving the supply of goods to output firms, and improving relationships between traders and farmers, with a particular focus on the maize value chain. As a result of the dialogue, FTF Inova facilitated connections among supply chain market actors that may lead to future alliances. For example, MeTL identified companies like *Cervejas de Moçambique* (CDM) for a potential commercial partnership, with particular focus on improving the relationship between traders and farmers on maize supply. FTF Inova will monitor further discussions among these participants and any potential ideas that may be piloted. ACIANA was extremely pleased with the format and discussions, and saw additional opportunities to entrench itself with stakeholders by coordinating meetings, following up on agreements and decisions, mediating, and familiarizing itself with government regulations.

I.2.2 Key Challenges and Lessons Learned

- To move this portfolio forward, it is important to work with potential partners on identifying gaps along the supply chain and understanding the different types of tactics that can be put in place to improve competitiveness and performance in their relationships, such as establishing business alliances with suppliers and support firms.

I.2.3 Next Steps

- Finalize the procurement for and begin implementation of Condor Nuts’ traceability system.
- Invest in mapping Mozambique-grown and value-added products to inform innovations around agriculture consumer products targeting the end market and create better evidence for future investments.
- Promote further dialogue and meetings with MeTL, CDM, and *Novos Horizontes* to discuss the key constraints they face operating in the Mozambique agricultural market, and determined how FTF Inova can offer support through pilots.

I.3 Interconnected Systems

I.3.1 Description of Activity, Achievements, and Progress

The Interconnected Systems portfolio, consisting of the media-support and the academia functions, took steps forward in leveraging radio and interns to support partners in other portfolios, but encountered strategic challenges in expanding the breadth and depth of the portfolio as a whole. The media-support function continued testing radio programming in partnership with input firm Phoenix Seeds, as well as working with *Isolmoc* and Olam to produce programming promoting the introduction of professional spraying services in Ribaué. Similarly, the community radio forum (CRF) approach was integrated into 14 community radios in the provinces of Manica and Nampula. Nonetheless, the community radio partners remain fragile; financial and capacity challenges have slowed progress in building on initial successes.

The academia function continued to integrate interns into agribusinesses this quarter, with input firms hosting five interns. Strategically, FTF Inova adapted its approach to one in which it supports HEIs to take ownership of the internship program by developing a program that uses simple training modules and tools to improve students' preparedness for the workplace. During Q2, FTF Inova oriented the internship program coordinators at two HEIs—UBS and UCM—to tools and templates that provide students with knowledge on how to support agribusinesses as they expand further into the last mile. The coordinators at UBS then replicated the orientation session with its students, demonstrating the effectiveness of the approach.

Both the media-support and the academia functions have met the timelines established in the FY 2019 annual work plan for some activities, while other activities have been delayed. For the media-support function, delays are, in part, due to visa issues for the media engagement consultant. In the next quarter, FTF Inova will continue to pursue different avenues to further build the depth of this portfolio, including seeking buy-in from private sector partners on radio strategies and prioritizing engagement with committed community radio partners willing to expand upon the CRF model. FTF Inova will also look to further support HEIs invest in their internship programs and initiate relationships with agribusinesses.

Media

Radio Sussundenga and Radio SIRT, Deal Notes. During Q2, Radio SIRT and Radio Sussundenga continued to produce and broadcast a total of 16 interactive radio programs aimed at increasing awareness of the Phoenix Seeds brand, providing information on agricultural best practices and promoting discussions on how to optimize the use of seeds. These programs allowed Phoenix Seeds' technicians to interact with listeners via phone calls and capture listener feedback. Further, the program incorporated field days where five radio programs were recorded outdoors, allowing direct interaction between Phoenix Seeds and SHFs in target communities.

Other community radio stations, Deal Notes. As part of the Deal Note implementation with *Isolmoc* and Olam in Nampula, the Community Radio of Ribaué produced 14 weekly radio programs promoting and creating awareness of the professional spraying services of cotton fields in the districts of Ribaué and Lalaua. Incorporating field interviews with SHFs and interviews with experts from Bayer, *Isolmoc* and Olam, these programs provided SHF listeners with technical, health-related, and practical information on the introduction of professional spraying services.

Community radios from Manica Province (Sussundenga, Tambara, Macequece, Guro, Mossurize, Chimoio, and Macequece) and Nampula Province (Ribaué, Monapo, Namialo, Mogovolas, Angoche, Moma and Erati) incorporated the CRF approach into their existing agriculture-focused radio programs, capturing farmers' opinions, discussing issues on agricultural matters, and providing answers based on interviews with agribusinesses and local extension workers. Major issues raised by SHFs related to the lack of access to quality inputs, the lack of financial means to acquire inputs, and the poor germination of seeds available in the local markets. Despite these successes, efforts to expand the reach of the CRF model have encountered some

challenges, including the cost associated with the programming and a lack of capacity within community radios.

Academia

Universidade do Zambeze, Universidade do Lurio Business School (UBS), Instituto Superior Politecnico de Manica (ISPM), Universidade Catolica de Moçambique (UCM), and Eduardo Mondlane University, MOUs.

In Q2 of FY 2019, FTF Inova engaged in discussions with several HEIs, including UBS in Nampula, ISPM in Manica, and UCM in Chimoio. This represented a change in approach, since the purpose of these discussions was to pitch a way for FTF Inova to support HEIs in taking ownership of the internship program by developing more gender-inclusive, practical, and market-oriented internships using simple training modules and tools with the potential to improve students' workplace skills. As part of this new approach, FTF Inova held orientations with internship program coordinators at UBS and UCM introducing tools and templates that can be leveraged for internship program management. The templates focused on customer-centric services and shop layouts, customer database management to inform business decision making, marketing innovations, and expansion tactics. Interns can use these modules to support agribusinesses to more effectively reach the last mile.

The coordinator at UBS replicated the orientation session for 71 undergraduate students across the school's economics and business courses to ensure students' success in their internships and to add value to the companies that host them. The induction increased students' interest in the internship program. UBS is also conducting an assessment with local market actors to inform curriculum design of short courses intended to help interns and host businesses get the most out of each internship. Internships resulting in win-win outcomes will strengthen the overall link between HEIs and agribusiness, a key factor in the sustainability of the innovation. As internship supervisors are at the forefront of evaluating internships, reviewing the effectiveness of internship programs, and recruiting market actors through networking events, the next step is for coordinators to orient supervisors in productively overseeing and evaluating students during and after their internships. At UBS, FTF Inova has engaged post-graduate students in the internship program (in addition to undergraduate students), for initial placements with FTF Inova's MEL team in Nampula. A large number of applications have been received and are currently being screened. Selected interns will start next quarter.

FTF Inova coached five interns (one from UCM and four from ISPM) to conduct trainings for 35 VBAs (24 from K2's network, five working with Luteari, and six working with Cantina 2001) on market outreach and growth-oriented strategies, including marketing tactics that do not require a heavy investment of resources. Input firms have acknowledged the strategic value of support from interns; K2, for example, has begun to see quick returns on its investments. As FTF Inova encourages HEIs to leverage interns as future mentors, some of these interns are now involved in orienting their peers, sharing their own experiences and learning.

Similar orientation sessions for supervisors and students in their final year of undergraduate studies are in the planning stages at two other HEIs (ISPM and UCM). In addition to the uptake of orientation sessions, opportunities are also increasing as firms gain positive experiences with interns. For example, CdA has expressed interest in testing similar market outreach strategies with the support of interns after having already successfully hosting two marketing and brand management interns in Q2.

FTF Inova has found that using concrete internship opportunities as a leverage point has served as the best-suited mechanism for engaging HEIs in the context of its MOUs, since the concrete value of each set of internships can mobilize buy-in from within the HEI administration. According to the FY 2019 annual work plan, adaptations of the internship program are generally proceeding on schedule. In Q3, FTF Inova and its HEI partners will look at ways to go beyond individual sets of internships to influence attitudes and behaviors in the system by exploring different types of activities, such as networking tactics.

I.3.2 Key Challenges and Lessons Learned

Media

- As stated by partner radios, there are a number of logistical challenges associated with the production of CRFs at the district level. First, there is a geographic mismatch between where radio stations operate and where SHFs are located that is difficult to overcome due to financial constraints and limited transportation options. Second, there is a repetition of issues raised, but responding businesses and partners have limited availability to address the issues, making it difficult to fill a 30-minute program. Third, there is low female participation in the radio forums. Finally, there is low participation among government spokespersons to offer feedback to the community forum. To overcome these constraints, community radios can use innovative solutions such as creating monthly inserts based on interviews with the community and agribusinesses, and activating networks of community volunteer correspondents to capture feedback from the field. To increase women's participation, community radios can utilize a female counterpart. Lastly, an opportunity exists for non-government community radio stations to learn from their peers on how to engage government representatives at the community level.

Academia

- A range of complex challenges, such as pedagogy, resources, roles, workload, participation and nomenclature have been identified during the implementation of the FTF Inova internship program.
- The key challenge to recruiting and placing interns is logistics. Some partners, particularly those engaging VBAs and agrodealers, operate in locations far from where students are recruited. Remoteness and poor road infrastructure make it difficult to place interns in locations such as Mossourize in Manica or Lalaua in Nampula. FTF Inova is exploring possibilities of engaging local educational institutions, including technical schools to provide interns and has started conversations to partner with the *Instituto Agrario de Ribane* to provide local intern support to partner activities.
- Despite a keen interest to develop new internship programs within HEIs, it can only be successfully implemented with the full support of senior management. HEIs need to place a strategic importance on the initiative, adequately fund the program's development and implementation, and provide professional development for HEI staff and industry partners involved with the initiative. There is a need for a strong congruence of policy, culture and support if successful implementation is to occur.

I.3.3 Next Steps

Media

- Pilot audience surveys for select community radio stations using unstructured supplementary service data (USSD) technology (SMS and mobile calls) to generate actionable insights into the profile and preferences of radio station listeners. This pilot will allow FTF Inova to evaluate the success of the media intervention.
- Hire media monitors to work closely with the FTF Inova Communications Specialist and the MEL team to assist in tracking market actor responses to activities and to collect evidence on the intervention's effect on beneficiaries.
- Hire a marketing consultant to mentor radios in improving marketing skills. The marketing consultant will conduct a baseline survey of current marketing, design marketing materials, and conduct training for community radio marketing teams.

Academia

- Conduct orientations sessions with coordinators, students, and supervisors at other HEIs. Provide support to coordinators in orienting HEI supervisors so they can effectively oversee and evaluate students during and after internships.
- Identify HEI partners interested in hosting networking events with agribusinesses focused on alliance building between HEIs and market actors.

- Leverage past interns to mentor new interns through organized learning events at their academic institutions. Such mentorships provide feedback and contribute to reviews of academic curricula.

1.4 Support Service System

1.4.1 Description of Activity, Achievements, and Progress

FTF Inova advanced its activities in the Supply Service Systems portfolio, particularly in the professional spraying services, mechanization, and marketing platform functions. During the quarter, FTF Inova made strides in its partnership with *Isolmoc*, Bayer and Olam with the roll out of the professional spraying services pilot. The new spraying service has been generally well-received by SHFs, while also yielding a number of value-added lessons for FTF Inova and its partners as they explore further pilots with other agricultural products like cashew, potentially with *Ngala Investimentos*. In the mechanization function, FTF Inova signed a Deal Note with *Prodeca Sarl* to explore the viability of mechanization services in the Mozambican context and identify potential innovations to pilot. Further, FTF Inova facilitated a stakeholder dialogue on transport and logistics that was positively-received, and provided participants a venue to network and discuss issues related to the quality and availability of logistics services. FTF Inova will continue to explore opportunities to test innovations in logistics with its partner *Adicional*. Finally, after developing a national seed award program, Association for Promotion of the Seed Sector (APROSE) and FTF Inova discussed the feasibility of continuing the partnership, having APROSE implement the seed program it designed. FTF Inova will also explore additional potential partnerships to test innovations in mechanization, logistics, and market services platforms.

Activities in this portfolio were generally in line with the proposed timeline in the FY 2019 annual work plan. One exception is the partnership with *Ngala Investimentos*, which is currently exploring new opportunities to test spraying services or performance-based tactics.

Spraying Services

***Isolmoc*, Deal Note #1, Bayer and Olam, MOU.** In Q2, implementation of the agreement between FTF Inova and *Isolmoc*, Bayer, and Olam commenced, testing the use of professional spraying services to increase value for SHFs by delivering better quality products (from Bayer) and reducing exposure to harmful chemicals. By investing in higher quality inputs, both seed and fertilizer, and better crop management, Olam aims to increase the volume and quality of cotton production, maximizing its return on investment and ensuring environmentally-friendly farming. This quarter, the partnership initiated spraying services after training professional spray service providers in the districts of Ribaué and Lalaua in Nampula Province. FTF Inova worked with Olam and Radio Ribaué to produce a radio program to raise awareness of and promote the value and technical aspects of the spraying service.



Júlio Cavala, a professional sprayer from Namige-Ribaué, recently trained as part of the pilot

The pilot made strides in launching professional spraying service, while also learning how to adapt the intervention to challenges it encountered. FTF Inova in conjunction with *Isolmoc*, Bayer, and Olam conducted a baseline assessment this quarter to measure perceptions of and satisfaction with the introduction of professional spraying service. The assessment revealed that farmers were generally positive about the new services. However, farmers perceived the price for the service to be too high, which is affecting participation. Farmers choosing not to partake in all six applications of the full package will not likely see the full benefits of

the service. The pilot also revealed other key implementation challenges, such as farmers' poor agricultural management practices, poor data on the cotton fields being sprayed, transport issues affecting the distribution of agrochemicals, and a perceived lack of value and motivation by spray service providers. The partners are working together to address these challenges (for more details, see Key Challenges and Lessons Learned below).

In addition to the baseline assessment, FTF Inova conducted an early review of the business aspects of the spraying services intervention; the final report will be submitted next quarter. In Q3, *Isolmoc* will initiate marketing campaigns targeting farmers and conduct market research to ensure that the value proposition, and not just the price point, are well understood by farmers. Progress on this partnership is aligned with the activities established in the FY 2019 annual work plan. For more information on the baseline study, see Section 5.

***Ngala Investimentos*, MOU.** Limited progress was made in the partnership with *Ngala Investimentos*, a company specializing in cashew spraying and the maintenance and repair of sprayers. The intent of the partnership is to further develop professional spraying services across multiple crops (cashew, cotton, maize, beans) through the use of quality agrochemicals, which will result in higher yields and increased incomes to SHFs. *Ngala Investimentos* is well poised to pilot spraying services to horticulture producers in Nampula province. As such, this quarter FTF Inova held informal discussions with HortiSempre—a market systems development (MSD) project funded by the Swiss Agency for Development and Cooperation and based in Nampula Province—to leverage their expertise and identify opportunities to pilot spraying services among horticulture producers. However, it was decided to put this collaboration on hold, as the horticulture season has already begun. Applying lessons from the pilot with *Isolmoc*, FTF Inova will pursue opportunities to partner with *Ngala Investimentos* to upscale professional spraying services with other crops.

In addition, *Ngala Investimentos* is in search of a model that allows cashew producers to continue to make in kind payments for spraying services, which minimizes the risk of side-selling and increases the repayment rate among clients. FTF Inova has initiated discussions to deepen the partnership with *Ngala Investimentos* by focusing on capacity building, developing marketing and branding of services, and developing performance-based incentives and rewards for spray providers to enhance trust and create a viable service for clients. Activities under this partnership are currently being discussed as part of ongoing Deal Note negotiations, but are anticipated to commence in Q3. This is delayed from the schedule in the FY 2019 annual work plan.

Mechanization

***Prodeca Sarl*, Deal Note #1.** FTF Inova signed a Deal Note with *Prodeca Sarl* this quarter to explore SHFs' the mechanization needs outside of current offerings (land preparation and planting) and to determine the viability of offering such services to SHFs in the Mozambican context. FTF Inova will assist *Prodeca Sarl* by hiring two consultants—lecturers from ISPM—who will work with interns to gather information on viable services and potential innovations to pilot. The recruitment process for the consultants is in progress with field activities expected to start in May 2019.

In addition, *Prodeca Sarl* is interested in piloting an alternative financing mechanism for rural farmers to fund input products and services via a domestic remittance system. This includes development of a market strategy for a new emerging customer segment (SHFs) to increase investments in high-quality inputs and services like mechanization. Market research will be conducted to understand the flows and purpose of remittances related to input purchases. According to the FY 2019 annual work plan, this partnership is on schedule.

Logistics

Appload, Deal Note #1. FTF Inova formally closed Deal Note #1 with AppLoad this quarter. FTF Inova will continue to engage on any proposed innovations Appload would like to test that fit within FTF Inova's strategic approach. This partnership was completed prior to the schedule outlined in the FY 2019 annual work plan.

Adicional, notable prospective partnership. During this quarter, FTF Inova facilitated market linkages between *Adicional* and prospective clients at the two stakeholder dialogues in Nampula for supply chain and transport and logistics. FTF Inova will follow-up with *Adicional* on these prospective business partnerships to determine any role it can play in piloting innovations. This partnership is proceeding in accordance with the FY 2019 annual work plan.

Market Services and Platforms

APROSE, Deal Note #1. The Deal Note with APROSE concluded this quarter after development of the Seed Award Program to promote competitive distribution of quality seeds to the SHFs market segment was completed. FTF Inova and APROSE are engaged in discussions to determine ongoing support to pilot the Seed Award Program. While FTF Inova has no objection in continuing to support APROSE, questions remain on APROSE's capacity to sustainably manage the program, both financially and technically, in the coming years. However, APROSE will hold its Annual General Assembly meeting in April, during which it discussions on the technical and strategic restructuring of the organization will take place in order to better manage donor-funded projects. Completion of the Deal Note was aligned with the schedule in the FY 2019 annual work plan.

Logistics and Transport Stakeholder Dialogue. In March, FTF Inova facilitated a stakeholder dialogue on logistics and transport in Nampula. Stakeholder dialogues are intended to be an innovative way to facilitate new connections among diverse stakeholders, allowing them to reframe challenges and enable collaboration and self-selection in testing catalytic innovations. The dialogue was hosted by the *Associação dos Transportadores Rodoviários Nampula* (ASTRA) and focused on opportunities for aggregation and formalization using a logistical framework. Feedback from participants was generally positive; participants appreciated having a forum to map out key stakeholders, hold earnest discussions on challenges related to quality and availability of services, and pitch to and network with other stakeholders who may be future business partners or clients. In fact, participants requested additional dialogues to further discuss key topics and challenges, allowing for deeper investigation, collaboration and opportunities to seek solutions. ASTRA's role as a convener of different stakeholders was also highlighted.

FTF Inova plans to facilitate additional stakeholder dialogues this year related to input distribution, finance and insurance, and ICT. This activity is on schedule with the FY 2019 annual work plan.

1.4.2 Key Challenges and Lessons Learned

Spraying Services

- Poor management practices and data led to a miscalculation of the number, size, and make-up of the plots to be sprayed, making it difficult to track the areas to be sprayed and resulting in a significant decrease in the hectares (ha) receiving treatments versus the planned pilot. To update its data, Olam is currently conducting a GPS-monitoring exercise, which it will share with *Isolmoc* to assist in planning and implementation of the pilot.
- Delays and other difficulties in the distribution of agrochemicals to SHFs also affected the spraying schedule. While *Isolmoc* initially considered cutting the pilot in half to address these challenges, it ultimately decided to take other mitigation measures, such as purchasing bicycles on credit for spray service providers to more expeditiously reach farmers and increasing the incentives for spraying (from 30 meticaís (MZN)/spray/ha to 40 MZN/spray/ha). *Isolmoc* will try to fast-track implementation of an incentive system to motivate spray service providers.
- Challenges existed in the partnerships' joint monitoring efforts, but improvements are underway. For example, all partners have agreed to use a common monitoring sheet to track information on the spray providers, SHFs and spraying services.
- It is crucial to target Olam's best cotton farmers at this stage to ensure the effectiveness of the pilot. The strategy is not merely to deliver spraying services, but to also encourage improved farming practices.

- As the number of cotton farmers and area covered per spray application decreased from the first to the third spray, *Isolmoc* will need to consider the amount of land and number of cotton farmers that can be covered under the pilot. Based on analysis, FTF Inova calculated that it may be more feasible to start with 1,400 ha, equivalent to about 14 ha per service provider, rather than the initial area of over 2,000 ha, or 20 ha per service provider. As expertise builds, spray service providers may be able to incrementally increase the area covered and number of farmers, potentially reaching 20 ha per service provider by the fourth season of spray application.

Mechanization

- Most of the current service providers do not offer complete packages for mechanization, such as mechanized de-stumping of the field. This limits the potential size of farms that can benefit from mechanization. In addition, it is important to communicate the advantages of mechanization to SHFs, including the business benefits.

Market Services and Platforms

- Lessons for future stakeholder dialogues include: 1) coming to an agreement between the facilitator and the host organization on the participant list to ensure there is diversity and a power balance among participants and objectives are met; 2) dialogue outcomes are more related to the willingness of stakeholders to collaborate than the host; and 3) inviting firms not in the agribusiness sector to dialogues provides a venue for support firms to better understand the agricultural market system and network with agribusinesses.

I.4.3 Next Steps

Spraying Services

- Leverage opportunities, such as *Isolmoc*'s presentation to the Cotton Institute, to share lessons and pitch professional spraying services as an opportunity to engage potential partners, such as Plexus and Sanam, that have expressed interest in replicating spraying service pilots with different crops. Consider pitching to input firms, such as *Ngala Investimentos* to embed spraying services into their current offer.
- Procure a market research firm for *Isolmoc* to explore the customer segment, and options for expanding professional spraying services to other crops, such as cashew and sesame to inform potential innovations on chemical packages offers based on current agricultural practices.

Mechanization

- Expand the number of partners and interventions in mechanization. A potential partner, Mocuba Farming Services (formerly a partner of Feed the Future Mozambique Resilient Agricultural Markets Activity Nacala Corridor (FTF RAMA-Nacala)), has been identified and has pitched innovative ideas on the marketing of mechanization services to the SHF market segment. Discussions will continue with the intent of establishing a partnership agreement to test these ideas by the end of Q3.
- Respond to challenges faced by small mechanization services in the Beira and Nacala agricultural growth corridors through capacity building in the management and marketing of mechanization services.

Market Services and Platforms

- Follow-up on meetings scheduled among stakeholders during the stakeholder dialogues.
- Conduct stakeholder dialogues for the input, finance (including insurance) and ICT sectors.

I.5 Business Service System

I.5.1 Description of Activity, Achievements, and Progress

FTF Inova continued to explore viable partners with which to test innovations in the Business Services portfolio. Potential partnerships in the financial services function garnered interest, but progressed slowly. A potential partnership with Hollard Agri to test the feasibility of weather index insurance was put on hold as FTF Inova conducts a risk evaluation to determine the level of investment it should make in the partnership. FTF Inova made progress on the ICT function this quarter after completing an ICT market assessment that provided a strategic road map to stimulate linkages between ICT firms and agribusinesses, and customize existing ICT solutions for the agricultural sector. FTF Inova will pursue recommendations from the assessment in Q3. In the marketing function, Tangerine began working with input firms to develop marketing strategies to create value and demand for marketing services in the agricultural sector, a key goal of the Deal Note that Tangerine is finalizing with FTF Inova. FTF Inova is also finalizing an agreement with Forcier to test marketing tactics in the agricultural sector. The final agreements for both marketing firms are anticipated to be signed and initiated in early Q3. While this portfolio experienced a number of delays, particularly in financial services, activities in other areas of the portfolio were implemented on schedule according to the FY 2019 annual work plan.

Finance Services

Hollard Agri, imminent partnership. This quarter, Hollard Agri submitted an application to probe improved financial flows to customers. The company is also interested in partnering with FTF Inova to co-invest in an innovation assisting input distributors in updating their client databases to include the location and field data vital to establishing weather index insurance. During this quarter, some small to medium input distributors such as Luteari showed interest in weather index insurance; however, these firms do not have updated databases of their clients.

Although the partnership with Hollard Agri is still imminent, it has been put on hold to address questions on the feasibility of weather index insurance in the Mozambican agricultural context. Based on some successful pilots with farmers, the concept remains innovative. FTF Inova will hire a Weather Index Insurance Specialist to conduct a risk evaluation that will help determine the level of investment FTF Inova should make in the partnership. Although the partnership is on hold, it is still on schedule with the FY 2019 annual work plan.

Letsego, notable prospective partnership. FTF Inova has not had any activity this quarter on this potential partnership. FTF Inova was awaiting feedback on a mobile banking pilot that Letsego is conducting in conjunction with *Grupo Joao Ferreira dos Santos*; no information has been shared to date. This potential partnership is delayed relative to the FY 2019 annual work plan.

Banco Comercial e de Investimentos (BCI), notable prospective partnership. During this quarter, FTF Inova contacted BCI on potential probes related to trader finance for agrodealers (Luteari); in-store credit for larger input firms (*Isolmoc*, CdA); and credit schemes and a payment facility for larger input firms, potentially integrated with M-Pesa to facilitate electronic payments from SHFs. BCI appears interested, and would like to engage their marketing and electronic specialists. Nonetheless, responses from BCI have been slow, however, FTF Inova is prepared to engage when BCI is ready. This potential partnership is on schedule with the timeline in the FY 2019 annual work plan.

Vodacom (M-Pesa), notable prospective partnership. FTF Inova continued discussions with Vodacom around innovations related to establishing infrastructure to support mobile money agents, possibly using a bulk payment approach to reach multiple suppliers. FTF Inova will continue to follow-up with Vodacom to determine if there is a viable partnership opportunity, but the response to date has been slow. According to the FY 2019 annual work plan, this partnership is delayed.

ICT Services

During the reporting period, FTF Inova, supported by Senior ICT Specialist from DAI's Center for Digital Acceleration, conducted an ICT and agriculture market assessment to understand the current state of ICT uptake by agricultural actors and to make recommendations on how FTF Inova could leverage and tailor local ICT solutions to meet the requirements of the local agricultural market system. A number of recommendations were outlined for FTF Inova to facilitate change and build alliances between ICT firms and agribusinesses. As a result of these recommendations, the development of partnerships in this area has been moved to Q3. For more information on the ICT and agriculture market assessment, see Section 5.

Additionally, following a presentation in December 2018, FTF Inova facilitated market linkages between Novo Madal and *Miruku*, and DevMozambique, a firm that is offering an ICT solution. Both Novo Madal and *Miruku* showed investing in the ICT platform to improve their supply chain management. Alongside cultivating these market linkages, FTF Inova will initiate discussions on how to approach each firm's ICT needs. These activities are proceeding according to the schedule outlined in the FY 2019 annual work plan.

Marketing Services

Tangerine, imminent partnership. During Q2, FTF Inova finalized details on a Deal Note with Tangerine to expand its understanding of the agricultural sector and identify opportunities to offer affordable services to various players. As previously noted, Tangerine will be working with input distribution firms, including AIPM and CdA, to develop customer-centric marketing strategies. Tangerine will also conduct a mystery shopper assessment, and will use the information gathered to provide guidance to agribusinesses. The Deal Note is expected to be finalized at the beginning of Q3, which is on schedule with the timeline in the FY 2019 annual work plan.

Forcier, imminent partnership. FTF Inova is currently in discussions with Forcier, a marketing research company, to organize roundtables for the business community showcasing how market research can guide decision making, identify opportunities for investment, and improve growth and return on investment. A Deal Note is currently being negotiated.

Other Marketing Service Providers. During Q2, FTF Inova conducted research on areas of focus for bottom-of-the-pyramid masterclasses. The master classes aim to develop the internal capacity of agribusinesses, notably in marketing, and to catalyze the use of third-party platforms. FTF Inova is currently exploring local or international organizations it can partner with to spearhead the effort, with an eye on long-term sustainability. This activity is on schedule according to the FY 2019 annual work plan; FTF Inova will continue to develop the concept in Q3.

1.5.2 Key Challenges and Lessons Learned

Finance Services

- Financial services providers are still not keen on providing financial products and services catering to SHFs because of the high risk involved. However, small- to medium-sized input distributors have shown interest in implementing innovative financial services and systems, such as mobilization of domestic remittances for input purchases that *Prodeca Sarl* is planning to pilot, or check-off arrangements like *Isolmoc's* tactic of providing bicycles to professional spray service providers on credit, which will be repaid from their future expected earnings.

ICT Services

- ICT services are analyzed in two dimensions, demand side and supply side. On the demand side, there is a lack of outreach from agribusinesses to ICT firms looking for solutions. There is a lack of knowledge of existing ICT solutions and the profit potential, and existing solutions have high costs.
- On the supply side, ICT providers lack understanding of the agricultural actors and the dynamics within the value chain. ICT firms do not see the revenue potential in agriculture so ICT companies are not approaching agribusinesses. Also, a geographic mismatch between ICT firms and agribusinesses makes targeting the agricultural market costly for ICT firms.

I.5.3 Next Steps

Financial Services

- Finalize the scope of work and recruitment of a consultant to work with *Prodeca Sarl* on conducting research and testing a financial remittance system.
- Continue engaging financial service providers with the intent of developing additional initiatives and partnerships to expand access to finance in the agricultural market system.

ICT Services

- Match ICT firms with ICT solutions for agribusinesses.
- Leverage existing convening platforms such as the Standard Bank Incubator Master Class to facilitate linkages between ICT providers and agribusinesses.
- Involve universities with computer science faculty in the internship program to build a cadre of ICT interns that can be placed with agribusinesses.

Marketing Services

- Formalize the partnership with Tangerine to implement marketing-related innovations, such as the mystery shopper assessments that will shed light on the challenges faced by agribusinesses and potential service-related solutions.

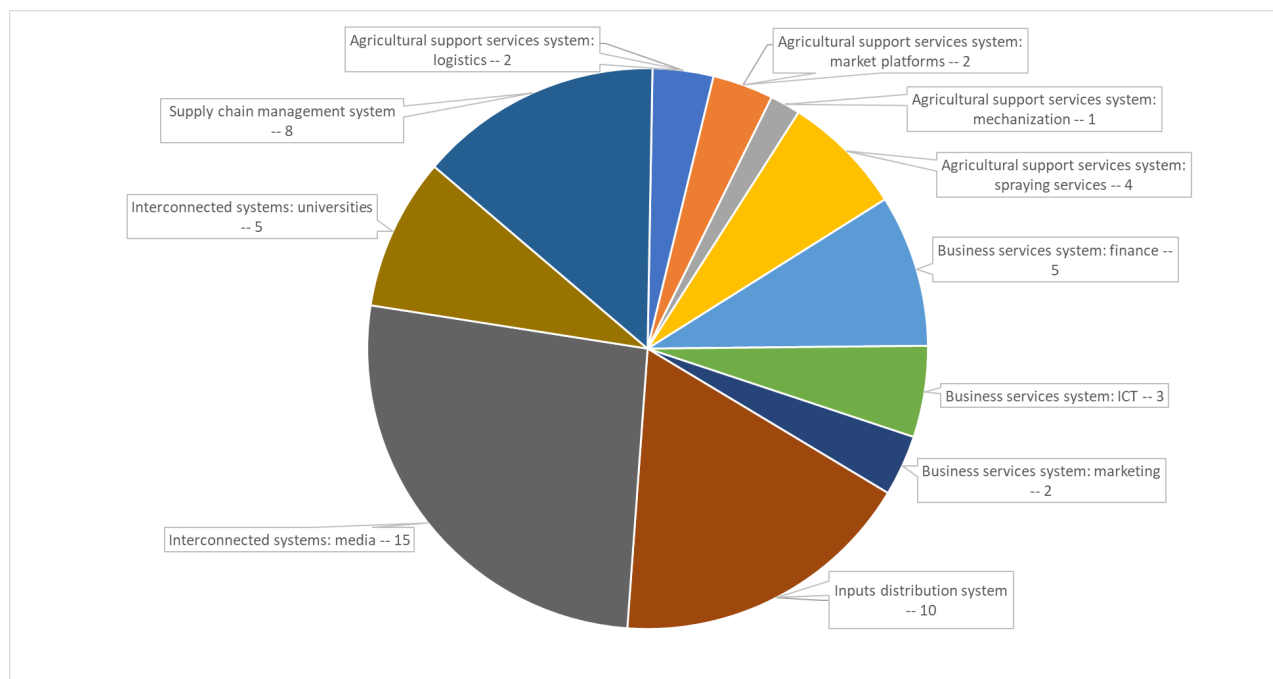
I.6 Partnership Pipeline Progress

FTF Inova closed the second quarter of FY 2019 with a strong portfolio of partners and activities in the Input Distribution Network System, and the foundations to expand and deepen the portfolios of partners in the other parts of the system.

I.6.1 Partner Distribution

In Q2 of FY 2019, FTF Inova focused on deepening the partnerships it established in FY 2018 and Q1 of FY 2019, finalizing a number of new Deal Notes and investing more intensively in its successful partnerships. Consequently, its pipeline of partners has not changed substantially since the end of Q1. Figures 1 and 2 represent FTF Inova's pipeline of partners, including both active partners and those with whom FTF Inova is negotiating partnerships, broken down by their role in the market system and by the geographic focus of the partnership activities, respectively.

Figure 1: FTF Inova Pipeline of Partners by Sector of Market System



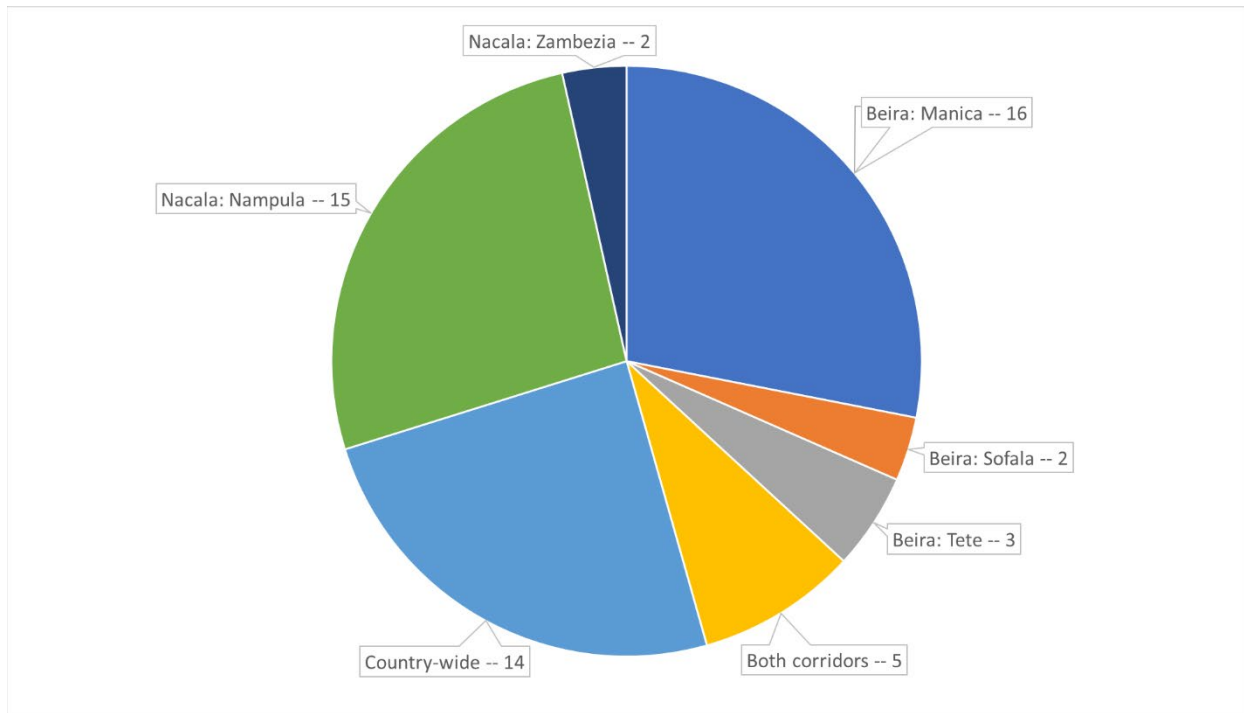
FTF Inova did not significantly increase the overall size of its partnership pipeline this quarter—two new partners were added, and two existing partnerships expired or were put on hold. However, FTF Inova did make some important progress in deepening its existing partnerships. While it remains most heavily invested in the Input Distribution Network System, FTF Inova’s focus this quarter on the Supply Chain Management System helped give more depth to those partnerships, particularly as it finalizes Deal Notes with *Miruku* and Novo Madal on performance clubs, signed an MOU with ACIANA to hold a stakeholder dialogue with commodities traders and support the association with follow-up facilitation work, and prepared to sign a Deal Note with Mozambique Good Trade to experiment with sourcing and marketing tactics. Talks continue with MeTL around potential interventions, and FTF Inova remains attentive to opportunities to spin off its work with Olam in the agricultural services area to try out supply chain innovations. After many quarters of facing challenges in gaining traction in the Supply Chain Management System, FTF Inova has grown a strong enough portfolio to begin to test probes in this area.

FTF Inova also strengthened partnerships in the supporting areas of the market system, setting the stage for deepening activities in these areas during Q3. It invested heavily this quarter in facilitating the new partnership with *Isolmoc* piloting professional spraying services. As the quarter closed, FTF Inova was finalizing a Deal Note with Tangerine, and had completed the initial round of due diligence to potentially utilize a grant mechanism as part of FTF Inova’s first Deal Note with Tangerine. The project also signed a Deal Note with *Prodeca Sarl* to assess the feasibility of mechanization services in Manica Province and began talks with Hollard Agri about expanding agricultural insurance products. Finally, the ICT and agriculture market assessment FTF Inova completed helped identify a number of promising partners in the ICT space. FTF Inova plans to deepen these new and existing partnerships in Q3.

This quarter, FTF Inova’s portfolio of media and academia partners served its activities well, with community radios and university interns playing an important role in a number of Deal Notes with partners in other areas of the market system, but the project is still looking to broaden or deepen these partnerships. Community radios and HEIs have very different business and governance models than the partners FTF Inova typically

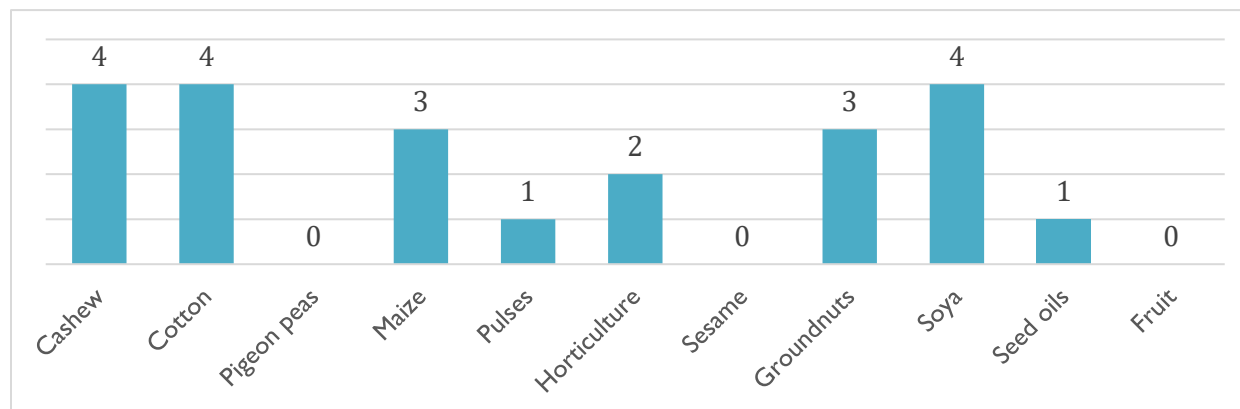
works with, and it has not yet settled on a model for facilitating more intensive partnerships with radios or determined how best to engage HEIs in a timely way.

Figure 2: FTF Inova Pipeline of Partners by Geographic Corridor



This quarter did not see significant changes in the numbers of partnerships in each geographic corridor, though it is noteworthy that FTF Inova invested particularly heavily in deepening the portfolio of partners in the Nacala corridor, launching the spraying services pilot with *Isolmoc*, finalizing Deal Notes with *Miruku* and Novo Madal, and holding two stakeholder dialogues in Nampula for the supply chain and logistics and transportation sectors. It also mobilized a consultant who identified a number of opportunities to expand FTF Inova’s work in the Input Distribution Network System in northern Mozambique. As such, the project is approaching a balance between the two geographies.

Figure 3: Value Chains Affected by FTF Inova Partnerships¹



Although FTF Inova is no longer a value chain project, it still monitors how its partnerships are connected to the agricultural value chains in Mozambique as part of its overall efforts to understand the impact of the project. Figure 3 represents how many partnerships FTF Inova can associate with each value chain. Most of its partnerships are not yet attributable to a specific value chain, especially in the Input Distribution Network System, the Support Service System (which has fewer field partnership activities than the Input portfolio), and in the Interconnected Systems. Many of these partnerships affect all of the value chains in the figure above.

1.6.2 Portfolio Quality

Although FTF Inova's strongest partnerships (such as with CdA and K2) remain in the Input Distribution Network System, this quarter it solidified activities with several promising new, high-quality partners across many of the other systems. In the Supply Chain Management System, *Miruku* showed its commitment to innovating by introducing a number of ideas it was co-creating with FTF Inova before the Deal Note was even finalized. In Support Service System, *Isolmoc* actively worked with FTF Inova, Olam, and Bayer to address some of the immediate challenges that arose in the ambitious spraying services pilot. And in the Business Service System, more in-depth conversations with Tangerine revealed that it sees its addressable market as largely saturated in the segments of the economy it currently focuses on, so finding new markets (such as agriculture) is a corporate growth priority. It also has strong and flexible internal management systems and a robust learning culture. FTF Inova is still in the early phases of its work with these three partners, but they all have the potential to serve as foundational partnerships in their respective areas.

1.6.3 Partnership Facilitation

Good facilitation is essential to FTF Inova's success, and it focuses on building ownership and sustainability into all of its partnerships. In order to ensure good facilitation and to gather insights into how to do facilitation better, the project leverage formal and informal systems to reflect and improve on its partnership facilitation.

The partnership management team held reflection sessions this quarter on Deal Notes with Winnua, AppLoad, and APROSE, all of which concluded in previous quarters. Some of the lessons learned included:

- While FTF Inova adjusts its hiring and procurement processes to give its partners as much of a voice as possible in order to foster ownership, in some cases (for instance, when working with a less experienced partner) it may be appropriate for FTF Inova to have a stronger hand in developing and

¹ Note that in this chart, the same partnership may contribute to multiple value chains. There are 45 partners that are not yet attributable to any specific value chain (and are not noted in the chart).

managing activities. This ensures resources are used efficiently and deliverables from consultants or firms are as useful as possible.

- Sometimes it is appropriate to implement activities with partners that do not have a pure market role (for instance, an organization heavily supported by donors or an arm of a business focused more on corporate social responsibility). Although they may not be promising long-term market actors, they can serve as useful conveners or information-gatherers. When such a partnership is being developed, FTF Inova has learned that the project team should better communicate these assumptions internally so that the team has a clear understanding of what FTF Inova hopes to get out of the partnership.
- FTF Inova's partnership facility provides good instruments for permitting self-selection, but it is still sometimes challenging to fully adopt a 'fail fast' project culture. Implementing the project's Deal Note with Winnua rapidly revealed that the performance club innovation on which the partnership focused its probing was not Winnua's highest priority. In contrast to a binding grant mechanism, for example, which might require revised milestones and renegotiations, the Deal Note approach allowed FTF Inova and the partner to swiftly disengage and, eventually, allow the Deal Note to lapse. FTF Inova expended only two percent of its total contribution to that Deal Note. While this is an example of the partnership facility leveraging self-selection effects to save the project time and money, it was somewhat more painful from a management standpoint, particularly because at the time FTF Inova was struggling to develop partnerships in the Supply Chain Management System. Moreover, the intricacies of negotiating a partnership in the first place makes it difficult to let go of one that is already on paper, making the team vulnerable to the sunk cost fallacy. The team has discussed how to more objectively identify weak partners and how to improve a team culture comfortable with failure.

The reflection sessions also revealed more tactical lessons about keeping the initial parts of Deal Notes light-touch, in order for FTF Inova to meet its commitments to partners on time. At the same time, the project is exploring internal management innovations to provide more resources at the pace expected by the private sector.

In Q3, the MEL and partnership teams will work on several more concrete metrics to assess the project's progress in these areas and will share more details in the next quarterly report.

2 Monitoring, Evaluation, and Learning (MEL)

2.1 Progress on Performance Indicators

As partnerships begin to mature and FTF Inova begins implementing intervention monitoring plans, FTF Inova expects to meet all targets set for FY 2019. Progress on key performance indicators in Q2 FY 2019 is summarized in Table 1.

Table 1: FTF Inova Progress on Performance Indicators

Number	Indicator	Cumulative results	FY19 Target	% Advance (HRP Target)	Observations
GNDR-2	Percentage of female participants in USG-assisted programs designed to increase access to productive economic resources	13%	35%	-62.9	On target
YOUTH-3	Percentage of participants in USG-assisted programs designed to increase access to productive economic resources who are youth (15-29) [IM-level]	19%	10%	+90.0	Achieved
EG.3.1-14	Value of new USG commitments and private sector investment leveraged by the USG to support food security and nutrition [IM-level]	362,905	1,071,027	-66.0	On target
EG.3-2	Number of individuals participating in USG food security programs.	4,509	5,899	-23.6	On target
EG.3.2-24	Number of individuals in the agriculture system who have applied improved management practices or technologies with USG assistance	9,288	8,418	+10.3	Achieved
EG.3.2-25	Number of hectares of land under improved technologies or management practices with USG assistance	9,462	9,556	-0.1	On target
EG.3.2-26	Value of annual sales of farms and firms receiving USG assistance [IM-level] -Value	16,212,082.74	6,353,526	+155.2	Overachieved
EG.3.2-27	Value of agriculture-related financing accessed as a result of USG assistance [IM-level]	9,667	416,667	-97.7	Will be achieved.
Custom Indicator #3	Number of farmers who have a new/improved commercial relationship with partner firms	2,372	1,021	+132.2	Overachieved
Custom Indicator #4	Number of FTF Inova partner firms who have new/improved commercial relationships with other firms	14	27	-48.1	On target

- **GNDR-2.** In Q2, an additional 160 spraying service provider candidates, two of which were women, were trained under the partnership with *Isolmoc*, Bayer, and Olam testing professional spraying services. Under the partnership with K2, six of 30 VBA candidates trained were women. These two partnerships resulted in a four percent female participation rate for Q2. In the first two quarters of FY 2019, *Isolmoc* and K2 together trained a total of 368 candidates—47 of which were women, equivalent to 13 percent of the total candidates. From Q1 to Q2, female participation decreased from 25 percent to 13 percent, mainly due to requirements restricting women, such as not allowing pregnant or lactating women to handle chemicals. Although the indicator is currently 62.9 percent below the target, the anticipated partnerships in the pipeline, particularly those with *Miruku* and Novo Madal, which were designed to have an estimated female participation rate of 25 percent, will make it feasible for FTF Inova to meet the target by the end of FY 2019.
- **YOUTH.** Under partnerships with *Isolmoc* and K2, 22 of 160 candidates for *Isolmoc*'s professional spraying services and 12 of 30 trainees for K2's VBA program were youth, totaling 13 percent and 35 percent youth engagement rate, respectively. In Q2, the youth engagement rate reached 24 percent, an 11-percentage point increase from the past quarter. As of Q2, youth engagement in FTF Inova partnerships achieved 90 percent more than the established target for FY 2019.
- **EG.3.1-14.** During Q2, FTF Inova partners (CdA, K2 and Cantina 2001) made significant investments in promotional campaigns and management practices, totaling 121,460 United States Dollar (USD). Additionally, to overcome a lack of motivation shown by some spray service providers, *Isolmoc* paid an additional incentive of 10 MZN/ha sprayed, resulting in a total of 690 USD for the 2,056 ha sprayed. *Isolmoc* also bought 29 bicycles on credit to help expedite delivery of spraying services. The total private investment in Q2 was 122,150 USD, which summed with new commitments gained in Q1 of 241,755 USD, totals 362,905 USD in new investments. As of Q2, this indicator is 66 percent below the target, a 10-percentage point improvement from Q1.
- **EG.3-2.** It is estimated that in Q2, 414 more individuals participated in United States Government (USG) food security programs than in Q1. This is largely made up of the clients from three agrodealers FTF Inova directly assisted. Currently at 24 percent below the target, FTF Inova expects to achieve the target given the project's continued support of agrodealers in growing their businesses, as well as the interest from these agrodealers in piloting the VBA model. Further, as the VBA model is showing promise, FTF Inova is expanding it to the Nampula region where more agrodealers will be directly supported to roll-out the model.
- **EG.3.2-24.** In Q2, a total of 7,024 individuals applied improved management practices or technologies. This brings the cumulative number to 9,288 individuals for FY 2019. This is a huge improvement over Q1, enabling FTF Inova to exceed the target set for FY 2019.
- **EG.3.2-25.** Similar to the number of individuals applying improved management practices or technologies, the land size operating under improved technologies and management practices in Q2 was estimated to be 7,274 ha, based on interventions with *Isolmoc*, K2, CdA, agrodealers, Luteari, AIPM, Condor Nuts and more. As of Q2, the total land size operating under improved technologies is 9,462 ha. FTF Inova is currently one percent below the target for FY 2019, and is expected to achieve the target in the next quarter.
- **EG.3.2-26.** In addition to the 14,532,284 USD in Q1 sales, total sales in Q2 are 1,679,799 USD, resulting in an aggregate sales figure for the first two quarters of 16,212,083 USD. This is more than double the target set for the entire year. The major contributors to sales for Q2 include K2 (59 percent), CdA (39 percent), Condor Nuts (three percent) and *Isolmoc* (two percent).
- **EG.3.2-27.** In Q2, FTF Inova supported embedding crop insurance—provided by Hollard Agri and worth 9,667 USD—into the intervention with *Isolmoc* to mitigate the risk of crop failure under the professional spraying services pilot. In Q2, this investment represents two percent of the target set for FY 2019; FTF Inova is confident, however, that other agriculture-related investments will be made in the quarters to come, allowing the project to achieve the target for the year.

- **Custom Indicator #3.** In Q2, a total of 2,372 farmers established new/improved commercial relationships with partner firms, more than double the target for the current fiscal year.
- **Custom Indicator #4.** Fourteen partner firms expanded their commercial relationships with other firms, as follows: Luteari with five VBAs; K2 with 15 VBAs; *Isolmoc* with 97 spray service providers; CdA with 12 agrodealers through the pre-order system and route roll-outs; Phoenix Seeds with Radio SIRT and Radio Sussundenga on radio programs broadcasting educational and promotional messages; K2 with community radios in Ribau, Monapo, and Erati; *Isolmoc* and Bayer with Radio Ribau; *Isolmoc*, Bayer, and Olam promoting professional spray service providers; CdA with Tangerine; K2 with CdA as a distributor for K2's products; and AIPM with Tangerine. Although this progress is 48 percent below the target, considering several other collaborations that are in the process of being formalized (for instance, Radio Ribau with Hollard Agri and K2; CDM and New Horizons with MeTL; MeTL and a local supplier; K2 with Muthiana and Hollard Agri; New Horizons with CDM and ACIANA), FTF Inova anticipates the target will be met.

2.2 Behavior Changes in the Market Systems

2.2.1 Changes in Commercial Relationships

One of the expected outcomes of FTF Inova's approach is that commercial relationships, which at the start of the project were primarily driven by transactional price values, will be strengthened between firms with similar functions within the agricultural market system, between firms with different functions within the system, and/or between firms and farmers. During this quarter, the MEL team worked on a coding structure to enable a deeper analysis of the benefits and costs of relationships between market actors, as some new interactions have started and, in some cases, there have been indications that commercial relationships are starting to change in terms of the quantity or quality of goods and services exchanged. The MEL team expects to provide a more detailed analysis in the next quarter, but notes the following types of movement in terms of commercial relationship dynamics during this past quarter: new relationships forming between market functions/portfolios; improvements in relationships for enhanced cooperation between firms; and new business models that seek relationships with farmers, not just transactions.

At this stage, movement does not mean that shifts will be sustained or ensure mutually beneficial gains. In future quarters, the MEL team will continue to monitor the sustainability, value and growth hypotheses of probes in order to determine whether and to what extent commercial relationships have been strengthened.

2.2.2 Business Model Innovation

Over the past quarter, 16 firms were surveyed for the Business Model Innovation Index (BII) score across the agriculture market system; respondents included nine agricultural input sector actors, four service providers, and three aggregators. As mentioned in the baseline conducted last year, the BII can be used as a diagnostic tool to showcase the existing momentum of innovation within a company. To this end, the MEL team found that more than half (62.5 percent) of the companies surveyed this quarter reported innovations or adaptations in the last six months.

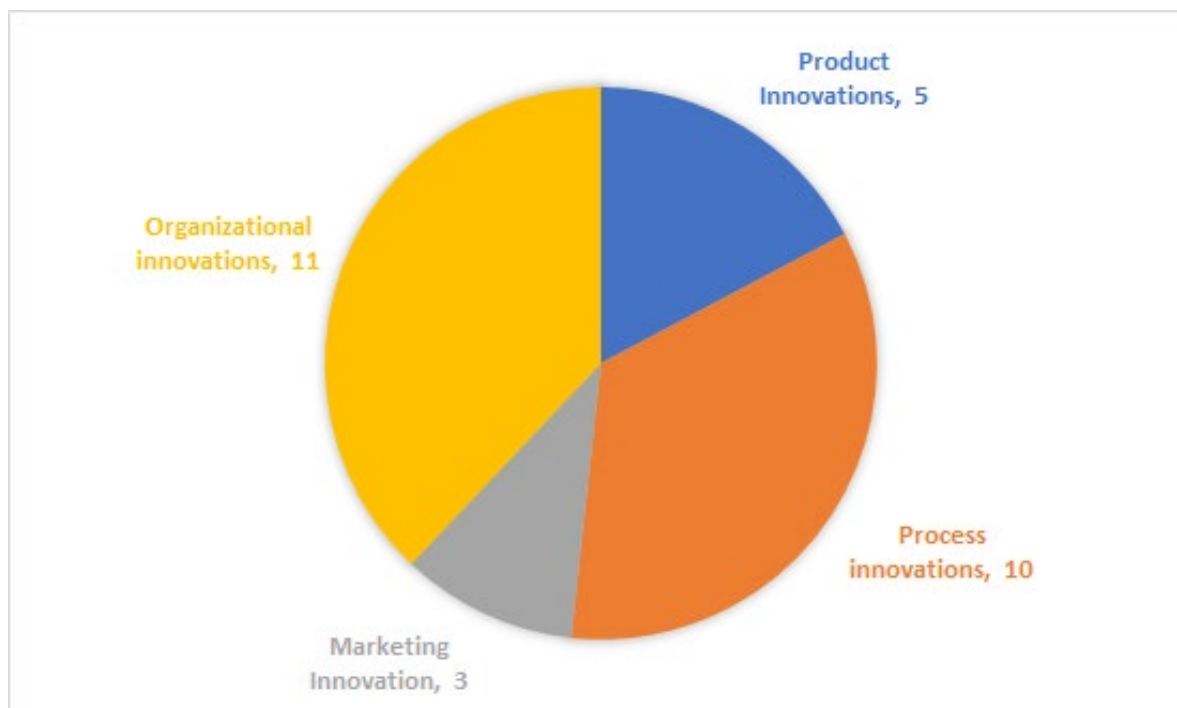
Fifty-six percent of the firms reporting innovations reported more than one innovation. The most prevalent types of innovations reported by firms were organizational and process-related, which are described below.

- **Organizational-related innovations.** These types of innovations focus on the way firms invest in supplier and customer capacity. For example, one agrodealer reported using demonstration plots to train farmers in using Bayer products, while another firm reported making an investment in the purchase and renovation of their new retail shop.
- **Process-related innovations.** These types of innovations reveal changes in the way agribusinesses have accessed information about the market in the past six months. One agrodealer traveled to the field to obtain information about markets, but now uses his phone to call instead. Another reported using

WhatsApp with a large-scale input supplier to share market information. Additionally, another business reported changes in accepting payments for products (like using M-Pesa) and no longer giving credit.

See Figure 4 for a breakdown of all the types of innovations reported by firms.

Figure 4: Business Model Innovations of Firms in the Agricultural Market System (last 6 months, as of April 2019)



The BII alone does not assess the quality or value of each innovation, and the MEL team plans to compare and analyze results from the BII at the mid-term and end-line, along with a variety of qualitative information on what each innovation entails, and whether and how it is intended to benefit or has benefitted each firm's competitiveness. Those firms that have entered into partnerships with FTF Inova over the past six months and have been interviewed also indicated receiving or sharing information with other actors FTF Inova is working with in the market system, like Bayer and CdA. Next quarter, the MEL team expects to complete more BII and other system health module surveys to assess whether a deductive analysis of changes in information flows within the Input Distribution Network System and/or other portfolios is warranted.

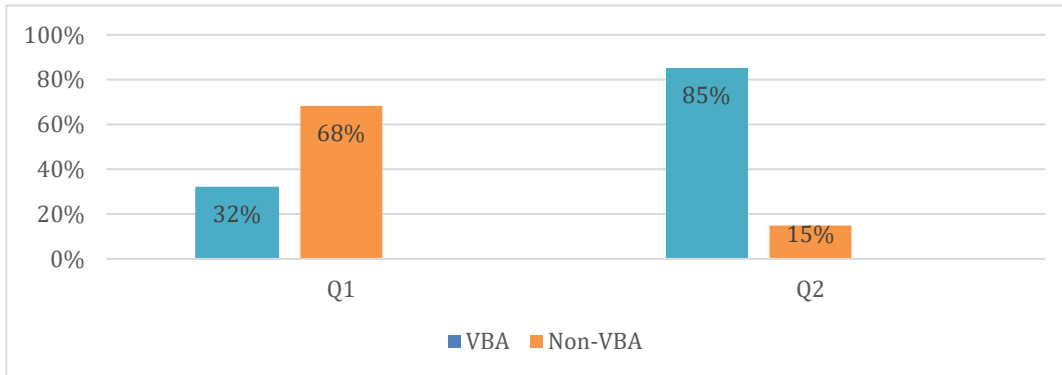
2.3 Outcomes

Lessons learned from performance monitoring during Q2 are as follows:

- **Distibution route pilot with CdA.** CdA's pilot of distribution routes indicated that the initiative generated three percent of CdA's total sales in Q2. The Machipanda and Nhamatanda routes achieved the highest sales, 36 percent and 30 percent of total sales respectively, followed by Munhinga (21 percent). The Catandica route had the lowest sales (13 percent). Given this scenario, CdA will have two considerations when planning the routes: 1) focus the marketing tactic on the high performing routes, and 2) develop marketing tactics, including incentives for the last two routes to boost their performance.
- **VBA model pilot with Luteari.** Results show that Luteari achieved a 200 percent increase in sales in the Gondola District, which is piloting the VBA model from Q1 to Q2. Furthermore, the VBA model shop

contributed significantly to an increase in total sales, from 32 percent of all sales in Q1 to 85 percent of all sales in Q2, showing the importance of the VBA model in increasing sales for Luteari. Figure 5 shows the effect the VBA model had relative to Luteari’s total sales between Q1 and Q2.

Figure 5: Luteari’s VBA vs. Non-VBA Sales from Q1 to Q2



- **Stakeholder dialogue.** As the host of the stakeholder dialogue on logistics and transportation, ASTRA raised awareness of the opportunities to improve efficiency in the transportation sector by capitalizing on the excess capacity that trucks have, providing an opportunity for trucks to carry agricultural outputs on their return trip, after delivering goods to rural areas. The president of ASTRA, Mr. Luis Vasconcelhos stated, “trucks consume about 20-45 liters of fuel one-way and spend about the same amount to return to their origin mostly empty”. Highlighting these opportunities, as encouraged by the provincial government, is an important step towards moving surplus produce from rural to urban areas.

3 Major Implementation Issues

3.1 Finalizing Deal Notes

The process for negotiating and finalizing Deal Notes is time-consuming and has affected the timelines for several partnerships, such as Novo Madal, *Miruku*, and Mozambique Good Trade. In some cases, partners require time to meet the partnership paperwork requirements. FTF Inova is currently examining the process to identify opportunities to streamline the process while still meeting all requirements. It may also be worthwhile to invest more time and energy up front to identify the clear business opportunities for partners to innovate, potentially investing more resources into research.

3.2 Cyclone Idai

On March 12, Cyclone Idai, one of the most powerful storms to ever impact the Southern Hemisphere made landfall near Beira, and proceeded through Sofala and Manica Provinces, adding precipitation to a region already impacted by high seasonal rainfall. The storm left massive destruction in its wake, directly and indirectly affecting FTF Inova's partners and SHFs targeted by the project.

The initial information from partners indicates that most partners were impacted by the storm, but most were not directly affected. K2 lost the roof of one of their warehouses and powerlines were knocked down—issues that needed to be resolved quickly to restore refrigeration for their seeds. Some of Luteari's VBA technicians had their houses destroyed, and the internship program needed to be delayed. Phoenix Seeds is predicting a 20 to 40 percent loss on its maize seed.

Damage to infrastructure also affected project partners' operations. The VBA pilot FTF Inova is testing with agrodealers was affected by damage to roads and bridges, making it difficult to access communities for meetings. Demonstration fields were also destroyed, and a scheduled field day was cancelled. Agrodealers are working to resume regular operations, assessing how to best reach farmers in communities cut off by the cyclone. In addition, the distribution of Yara International's fertilizer will be disrupted due to destruction on the N6 highway. Ongoing partnership negotiations between FTF Inova and Yara International were also interrupted by the cyclone, as the main office lost all connectivity (FTF Inova was able to maintain contact with Yara International's agronomist in Chimoio). APROSE also postponed a meeting of the General Assembly scheduled for early April in Nampula, as the majority of its members are based in central Mozambique and were affected by the cyclone in one way or another.

While the recovery period progresses, one partner, Phoenix Seeds noted that the dynamics of input firms are likely to be negatively affected, as not only the production and infrastructure of some input firms were damaged, but interventions by relief organizations and the government will entail buying and distributing free or subsidized inputs to SHFs, actions that may distort the market. In fact, based on a report from the donor food security committee organized in response to Cyclone Idai, distribution of seed kits, including maize, beans, vegetables and a few basic tools was to start by April 9 in Beira. The Food and Agriculture Organization (FAO) of the United Nations set a target of distributing 17,000 to 18,000 seed kits (one NGO expressed concern on the availability of that amount of seed stock in country).

FTF Inova will continue to monitor opportunities and participate in efforts aimed at establishing resilience among partners, SHFs, and the marketplace, particularly those that underpin the role of agricultural firms in the market system. For example, FTF Inova is considering doing a rapid assessment on the potential market distortion resulting from the cyclone.

4 Collaborating, Learning, and Adapting (CLA)

4.1 Learning Events

In Q2 2019, FTF Inova participated in a number of collaborative meetings and learning events, and continued to identify opportunities to share learning from the project. Key collaborative meetings, learning events, and staff trainings are presented below.

Collaboration with other projects in Mozambique, as well as with partners, is a key element of FTF Inova's approach. During this quarter, FTF Inova actively engaged with another FTF project, as well as with its partners via stakeholder meetings.

- **Collaboration with other FTF projects.** Prior to the closing of the FTF RAMA-Nacala project, FTF Inova held a meeting to identify potential partners in mechanization. Based on FTF RAMA-Nacala's previous interventions and FTF Inova's potential pipeline, the teams identified the following potential areas support mechanization firms: 1) internal equipment management systems; 2) demand creation through strategic marketing strategies within the SHF market segment; and 3) capacity building of service providers to SHFs, matching services with crop-specific needs. Subsequently, FTF Inova and FTF RAMA-Nacala conducted a scoping mission with mechanization services providers in the Nacala corridor to explore more opportunities and compare challenges. FTF Inova will continue to assess the opportunities and viability of mechanization and irrigation service activities, per FTF RAMA-Nacala's recommendations.
- **Baseline Assessment with *Isolmoc*, Olam, and Bayer.** As previously discussed, FTF Inova conducted a baseline assessment this quarter in collaboration with *Isolmoc*, Olam, and Bayer. The study showed that farmers perceived value in professional spraying services: all the farmers interviewed (20 total) were satisfied with the spraying services and the quality of the chemicals supplied by Bayer. In addition, there was significant interest in minimizing health risks and increasing productivity. Nonetheless, farmers raised some concerns about the number of treatments in the package (some farmers felt six applications was too many) and the price (all the farmers interviewed felt the price was too high). As a result, progressively more farmers declined subsequent spraying applications, which will likely affect the final benefits to crops. Despite the price perception, the majority of farmers stated they would continue buying the service in the next campaign, while the remainder said they would wait to see the results. As discussed above, *Isolmoc*, Bayer, and Olam are working together to address the issues that emerged, including pricing, and have decided to proceed with the full pilot.
- **APROSE meeting.** FTF Inova met with APROSE to discuss lobbying that the Uniao Nacional de Camponeses is doing to entice SHFs to use local seed varieties, and to encourage the Government of Mozambique and NGOs to facilitate research on the use of these varieties. Further, in collaboration with APROSE, the FAO is proposing to hire a consultant to carry out a study on the potential of strengthening the use of local varieties, preliminarily focusing on local varieties that are: 1) naturally resistant to local diseases and pests; 2) easy to store, with longer storage time than the improved varieties; 3) more resistant to climate change; and 4) cheaper and easily available to SHFs.

In addition, FTF Inova engaged a number of internal and external learning events during the quarter to share activity findings and highlight challenges and successes experienced by the project.

- **Learning event from the CdA pilot on route mapping.** FTF Inova facilitated a learning event based on the results of the initial distribution pilot that CdA ran in December 2018 using their own truck. Based on these results, the testing was adapted, and the piloting continued in January 2019, with changes that included engaging in more up front planning, developing clearer messaging, leaving informational

materials with agrodealers during visits, and outlining a clear offer for preferred agrodealers. A Senior Marketing and Business Development Specialist joined CdA for the second piloting phase.

- **Annual Conference of the Private Sector.** During the quarter, FTF Inova worked with the Supporting the Policy Environment for Economic Development (SPEED+) project to prepare a presentation for the Annual Conference of the Private Sector on March 13-14. The presentation discussed how the current business environment affects agriculture and suggested areas where the government and the private sector should focus improvements.

FTF Inova is also actively engaged in opportunities to build the capacity of staff and promote CLA internally.

- **Environmental compliance training.** In February, an Environmental Compliance Advisor completed site visits to Ribaué to inspect agrodealers, warehouses, and farms involved in the *Isolmoc* spraying services pilot activity. No major issues were identified, but the site visits served as the basis for a three-part training for FTF Inova staff on environmental compliance: one part focused on general environmental compliance principles, including a simulation of an environmental site visit designed to demystify environmental monitoring for project staff; another part focused on developing activity-level environmental monitoring and management plan with technical and the MEL team; and the third part consisted of in-the-field coaching on environmental monitoring at the *Isolmoc* pilot sites.
- **Ethics training.** DAI's Chief Ethics and Compliance Officer spent one day discussing ethics in implementing DAI projects with FTF staff. Although the team learned about common ethical issues, none of the issues were identified as critical for FTF Inova.
- **Internal CLA competition.** FTF Inova initiated a new internal CLA competition geared towards identifying and presenting lessons from the field to the whole team. As part of this initiative, EcoVentures International held a learning session focused on the experiences of Luteari, K2 and other agrodealers in implementing the VBA model. One key lesson that emerged was that agents need to be both business-minded, and trusted and endorsed by the community they represent. Pilots run by FTF Inova need to help agrodealers understand that agents are not inventory managers, but rather brand ambassadors to the community who can aggregate orders, reduce transaction costs, and activate demand while leveraging trust. Within this approach, agents do not act as independent businesses, but rather as employees of agrodealers. For the model to be successful, agrodealers also need to be committed to maintaining and nurturing the relationship with VBAs. Of the partners currently piloting VBAs, K2 and Cantina 2001 appear to be the most committed to dedicating resources to implement the recommended tactics.

Finally, FTF Inova continued to pursue opportunities to share learning from the project and its approach with other development projects.

- **Cracking the Nut – CLA Proposal.** FTF Inova submitted an application to the Cracking the Nut CLA event, scheduled to take place in Senegal on October 14-15, 2019. In conjunction with three partners (*Isolmoc*, Luteari, and Novo Madal), FTF Inova proposed to showcase how to get buy-in from the private sector. The theme of the presentation—“Increasing Inclusion in Commercial Markets”—will explore how implementers can build an effective business case to entice private sector actors to innovate and test new ways to include women in their business models. In addition, the panel will present how FTF Inova made the business case for the adoption of women-inclusive business practices to private sector actors and gathered feedback on what was compelling for each actor and what was not. Each partner selected has a different role in the agricultural market system, unique incentives, and varying degrees of success and perspectives on their pilots.

4.2 FTF Inova Research Activities

In Q2, FTF Inova commenced four research studies, summarized below.

4.2.1 Radical Adoption of Technology

During Q2, FTF Inova worked with two professors from the University of Ferrara (funded by the European Union) to review the data collection instrument for a study of farmers' behavior towards the radical adoption of technology. It is expected that field work will be conducted in the provinces of Manica and Nampula in May and June 2019. The collaboration is anticipated to shed light on farmer behavior, providing useful and actionable information for FTF Inova's partners, particularly those in the Input Distribution Network System.

4.2.2 Irrigation Study

FTF Inova and FTF RAMA-Nacala held a joint kick-off meeting for a study—“Support for Small Irrigation Water Delivery Entrepreneurs”—assessing the viability of specialized water delivery services and the options for scaling-up such services. The study analyzed an entrepreneur-centric model to deliver water services to SHFs. Interviews with potential partners revealed considerable interest in water irrigation and curiosity on the proposed business model. The study found that potential entrepreneurs still lack the basic technical skills needed to manage a semi-complex water delivery service. It was recommended that any project package to scale a multi-user irrigation scheme should include four aspects: 1) access to affordable and favorable financial conditions to buy equipment; 2) a toolkit to help entrepreneurs manage a new business; 3) technical assistance to entrepreneurs to operate irrigation services (i.e., advice on technical solutions); and 4) peer learning groups for entrepreneurs. The study also recommended further testing of the scheme with more significant and quantitative surveys (i.e., on willingness to pay, and the size and magnitude of the ‘pump renting model’).

4.2.3 Rapid Gender Assessment to Support Supply Chain Management

To support activities under the *Miruku* and Novo Madal interventions, FTF Inova conducted a rapid qualitative gender assessment focused on: 1) understanding gender-based constraints that may prevent women from effectively participating in performance clubs and out-grower/in-grower schemes; and 2) how to structure these schemes to be inclusive of women and contribute to their economic empowerment. Preliminary findings indicated that the agricultural associations targeted by the two firms have a relatively high level of female participation (approximately 25 percent of the members are female). The assessment also found that farmers face challenges in allocating sufficient time to non-food crops like guar beans (particularly during harvest); they spend sufficient time on the plots allocated to them, in part to prevent theft. This is important as it will be particularly difficult for women to manage their time due to household responsibilities. The research also suggested that a set of non-financial performance-based incentives, such as clothes, school fees, school materials, construction materials, bicycle and credit could be offered to female farmers. Along with incentives, selection criteria for farmers wanting to participate in the suppliers' clubs have been proposed to the firms. The next steps are to discuss and agree upon the proposed selection criteria and incentives with community leaders and firms.

4.2.4 ICT and Agriculture Market Assessment

During this quarter, FTF Inova worked with the DAI Home Office to conduct an ICT and agricultural market assessment to identify leverage points that match the supply and demand of ICT solutions for agribusinesses. The study was conducted in three different locations: Maputo, Chimoio, and Nampula. The study provided recommendations on openings in the market where FTF Inova could provide support: 1) facilitating matching of ICT providers with appropriate agribusinesses based on needs and cost/willingness to pay to create a mutually beneficial relationship between the sectors; 2) leveraging existing convening platforms that bring ICT providers and agribusinesses together to reach a broader audience, break down existing barriers, and ideally, spur further developments in response to specific demands identified during the forums; and 3) engaging the computer science department at universities to educate and engage future ICT providers about the agricultural market, specifically through facilitated co-creation workshops with agriculture

departments that provide students an opportunity to develop agtech tools to tackle existing challenges. This will enable a better understanding and appreciation of the market in the long term.

5 Management and Administration

5.1 Procurement

5.1.1 Operations Procurement

During Q2, FTF Inova initiated two procurements: 1) to find a service provider for continued health insurance and workers' compensation insurance for its staff; and 2) identify a new internet service provider for its offices in Maputo, Nampula and Chimoio. The contract for internet services is expected to be signed in Q3.

5.1.2 Technical Procurement

- **CdA, Deal Note #2.** During Q2, FTF Inova continued with three procurements and initiated a new procurement related to the Deal Note. Details are provided below:
 - FTF Inova concluded a pre-award procurement process started in Q1 for a marketing consulting firm to assess CdA's marketing and communication plan, design content for an online shop, and develop a digital catalogue. The partner, however, requested that the award be put on hold until an ongoing contract between the partner and the selected vendor was completed and evaluated. During the waiting period, the partner identified additional needs, which required a realignment of the deliverables. As a result, the timeline of this procurement was extended; the contract and deliverables are expected to be completed in Q3.
 - FTF Inova continued the procurement process initiated in Q1 for route management software (Optiflow) that will assist CdA to further pilot input distribution routes and expand their retail inputs to the last mile. As noted in Q1, the project identified Conundra as a potential service provider, and FTF Inova continued with the compliance steps to award the contract to Conundra in Q2. The award will be signed, and deliverables completed in Q3.
 - FTF Inova pursued a procurement of services to build a website for CdA, including an online shop. Also initiated in Q1, the pre-award compliance processes were concluded this quarter. The contract is expected to be signed, and deliverables completed in Q3.

In addition to the ongoing procurement outlined above, FTF Inova initiated a new procurement process in Q2 to provide a logistical solution that enables CdA to reach the last mile in Nampula, Manica, and Tete provinces. Using rental vehicles, service providers (to be identified) will deliver inputs and consumables to CdA's rural customers. Expected deliverables include: a test of the cost-effectiveness of the logistics system, establishment of a permanent presence, and delivery of products demanded. The evaluation and award process will be completed in Q3.

- **AIPM, Deal Note #1.** FTF Inova concluded the procurement started in Q1 for a Market and Product Branding Specialist to support AIPM in identifying and better understanding a target market segment for its new line of seeds. The contract was signed at the end of January and a kick-off meeting was held in early February. Despite an extension of the timeline due to challenges from Cyclone Idai, deliverables are still expected at the end of Q3.
- **Condor Nuts, Deal Note #1.** FTF Inova initiated a procurement process to identify services to design a traceability system and train Condor Nuts' staff on using and maintaining the system. During this quarter, the evaluation of the proposals was performed and three potential service providers were pre-identified. The procurement process is expected to be completed in Q3.
- **Isolmoc, Deal Note #1.** During Q2, FTF Inova concluded the procurement of agricultural weather index insurance initiated in Q1. FTF Inova expects to use the insurance (provided by Hollard Agri) to subsidize the cost of using superior agrochemicals as part of the professional spraying services pilot.

- **K2, Deal Note #2.** FTF Inova initiated the procurement of services of an events management firm to design and implement a range of promotional events, set up a framework to evaluate the promotional events, and develop guidelines for continuously conducting effective community promotional events. Implementation is anticipated to start in Q3.
- **Phoenix Seeds, Deal Note #1.** As a follow-up to the Phoenix Seeds radio program intervention, FTF Inova has commissioned a computer assisted telephone interview service to gather information on radio listeners' level of satisfaction and perception of the value proposition associated with Phoenix Seeds' products and services. This evidence will show the impact that radio may have on influencing brand trust, loyalty, and ultimately sales, and will be used to strengthen linkages between radios and the private sector in Q3. The contract has been signed, and implementation will start and be completed in Q3.

5.2 Grants Under Contract

No grants were issued during Q2 of FY 2019. However, FTF Inova identified one partnership for which a grant was the most appropriate instrument. By the end of the quarter, FTF Inova was in the process of finalizing the Deal Note the partner and met with the partner to discuss the grant process. FTF Inova also began the pre-award financial capacity assessment in order to issue the grant once the details of the activity are finalized.

5.3 Recruitment and Personnel

- **Positions hired.** An Account Manager was hired to support *Isolmoc* and lead the spraying services activity between *Isolmoc*, Bayer, Olam, and FTF Inova. The incumbent will be responsible for identifying and overseeing certified spray service providers and collecting data on the performance and impact of the activity. The field work started in February 2019 and the contract will end in December 2019.
- **Recruitments in Progress.** In Q2, FTF Inova selected a candidate for the IT Specialist position; it is expected that the incumbent will be onboarded during Q3.
- **Short-Term Technical Assistance (STTAs).** Eleven consultants were recruited in Q2 (see Table 2).

Table 2: STTAs Recruited in Q2 2019

Operations	
International Infographics Specialist	The consultant was hired to support the Communications Specialist and the local infographic consultant to produce a range of communication products. The International Infographics Specialist was also tasked with building the capacity of the local consultant. The assignment started in February 2019 and is expected to be concluded in May 2019.
Communication Expert	The consultant was hired to support FTF Inova with the quarterly reports and other communication products. The assignment started in March 2019 and is expected to be concluded in July 2019.
Technical	
Business Advisor	The consultant supported <i>Isolmoc</i> , Bayer, Olam, and FTF Inova in developing a sustainable program by conducting analysis on prices and costs and proposing a way to share risk across the companies involved in delivering spraying services to SHFs. The consultancy started in February 2019 and concluded in March 2019.
Technical Assistance to Review and Evaluate the Procurement of Software	The consultant will provide technical assistance to FTF Inova and CdA in reviewing and evaluating the procurement of route planning software that will allow CdA to reach customers in the last mile. The consultant will start and complete the second assignment in May 2019.
Acting Portfolio Manager	The consultant was hired to support the program and the partners during the maternity leave of the Input Distribution Network Portfolio Manager. The consultant began in January 2019 and successfully completed the assignment at the end of February 2019. The consultant was hired by TechnoServe.
ICT Specialist	The DAI Home Office STTA was brought on to help three pre-identified agribusinesses determine if ICT investments were viable, recommend a sustainability model, and conduct a market assessment of the use of ICT in agribusiness, presenting the key issues and solutions at a stakeholder dialogue. The assignment

	started in January 2019 and concluded in March 2019. The consultant has already submitted the technical report.
Village-based Agent Network Specialist	The consultant was hired to build the capacity of partner input firms in adopting better business practices, particularly around the VBA network model, and piloting buyers' clubs and customer-centric retailing strategies. The assignment started in March 2019 and is expected to be completed in May 2019.
Stakeholder Dialogue Facilitator	Two consultants were hired to facilitate a stakeholder dialogue for supply chain and logistics and transportation in Nampula, identifying opportunities for collaboration and helping various sectors become more inclusive and competitive. The dialogues started in March 2019 and are expected to be concluded in October 2019.
Women Economic Empowerment (WEE)	FTF Inova recruited a WEE Specialist to maximize the opportunities to improve the position of women in the market. The consultant will provide remote coaching to staff on integrating gender into their strategies, Deal Notes and activities. Pilots of WEE interventions are also anticipated to start with select partners. The assignment started in December 2018 and is expected to conclude in June 2019.
Traceability Specialist	The consultant will be hired to conduct the last review of eligible proposals of traceability systems for Condor Nuts and identify areas to streamline the technical approach. The activity started in June 2018; this is the final stage of the selection process. The consultant is expected to start and conclude in May 2019.
Marketing and Business Development Fellow - Fellowship program with TechnoServe	The team identified a need to hire a TechnoServe fellow to assess the overall viability of water delivery systems, including multi-user irrigation schemes, and to facilitate the design of a scheme through training and on-the-job coaching. This assignment focused only on completing the viability assessment, designing the multi-user irrigation schemes, and training. The fellow started and completed the assignment in January 2019.

- **Internship placements.** During Q2, FTF Inova recruited six interns, one intern working with FTF Inova and five interns working with partners in the following placements:
 - *Finance.* A Financial Assistant Intern was hired to assist FTF Inova with preparing vouchers, managing petty cash, preparing checks for payment, and preparing the finance report. The internship will run from March to mid-June 2019.
 - *Promotion of the VBA model.* FTF Inova selected multiple interns to support partners in implementing VBA models. Interns were mobilized to support agents working with agrodealers in Sussundenga (one intern), K2 (two interns) and Lutarei (two interns) with training sessions, information sharing with the agent, and direct support in the field.

5.4 Finance

A new Finance and Administration Officer joined FTF Inova's Nampula office in October 2018 and has been attending job training on DAI's Field Accounting System. It is expected that the officer will be fully certified, adding value to the overall financial management of the project, including preparation of the Annual Income Tax Report, assistance with Deal Note budget revisions, and compilation of field financial reports in Q3.

5.5 Key Challenges and Lessons Learned

Procurement

During the procurement of a traceability system for Condor Nuts, the project realized that it underestimated the budget for the system in the Deal Note; traceability is a new service in the Mozambican market, thus no similar, clear-cut proposals could be referenced with accuracy. To address the issue, FTF Inova has been negotiating several mitigating measures, such as reducing the scope of work, increasing Condor Nuts' contribution to the Deal Note, and transferring the cost of training and licensing to Condor Nuts. Following a meeting with the partner to revise the deliverables of this pilot intervention, Condor Nuts agreed to cover the additional costs that initially were to be paid by FTF Inova. From this process, FTF Inova learned the extent of the partner's commitment to the partnership in terms of its willingness to incur additional costs to pilot the intervention.

5.6 Next Steps

Human Resources

- Recruit the Weather Index Insurance Specialist to carry out a risk evaluation and develop the best strategy to use for WII in the Mozambican context.
- Assist Condor Nuts in recruiting a consultant to conduct a mock audit and ensure recommendations from the pre-assessment report have been met for BRC certification. The consultant will also train Condor Nuts' staff on meeting BRC certification requirements.
- Recruit a new Procurement Manager to replace the incumbent who resigned from the project, effective April 9, 2019.
- Recruit a consultant to facilitate stakeholder dialogues for the input, finance and insurance sectors.
- Hire consultants to support the media function: media monitors to track responses of market actors and collect evidence on the effect of media intervention, and a marketing consultant to support radios in improving marketing skills and training community radio staff.

Procurement

- Initiate the procurement of a CRM system for the implementation of Deal Note #2 with CdA that will enable CdA to track customer segment behaviors and identify and respond to potential opportunities. Implementation is anticipated in Q3.
- Conclude the procurement of fenced cages under Deal Note #1 with *Isolmoc* to assist SHFs in Ribaué with the safe disposal of pesticides.
- Complete the procurement of a marketing research firm for *Isolmoc* to design and pilot a model for professionalized pesticide spraying services in northern Mozambique by conducting a customer segmentation analysis and developing a marketing strategy.
- Initiate the procurement of a market research and marketing strategy development firm to assist Mozambique Good Trade in conducting market research, completing a customer segmentation analysis, and developing a marketing strategy.
- Conclude the procurement process for health insurance and workers' compensation for project staff, as well as internet services for the Maputo, Nampula and Chimoio offices.
- Conclude the procurement of a USSD Code service provider for the community radio surveys.

Administration

- Provide logistical assistance with the stakeholder dialogues for the input, finance and insurance sectors.

Finance

- Prepare the Q2 value-added tax report and Annex Z, due to USAID by April 15, 2019.
- Prepare the Annual Tax Returns Report for FY 2018 which is due to Maputo Tax Office by May 31, 2019.
- Contribute to monthly financial reports.
- Participate and provide support in the development of Deal Note budgets, as well as in the development of budgets for grants under contract.
- Continue to assist with quarterly budget projections and budget monitoring.

6 Key Activities Planned for Q3 2019

6.1 Status of Q2 2019 Planned Activities

Table 3: List and Status of Activities Planned for Q2 2019

Q2 Planned Activity	End of Q2 Status
Technical Activities	
Input Distribution Network System	
<i>Agro-Imbeu Parque e Máquinas (AIPM)</i>	
Redesign AIPM's brand and packaging to appeal to more SHFs	• Ongoing
Work with AIPM and marketing research firm to understand SHF preferences	• Ongoing
<i>Casa do Agricultor (CdA)</i>	
Continue to invest in targeted marketing tactics	• Ongoing
Work with CdA and marketing firm (remodel shop/review marketing materials)	• Ongoing
Support CdA's investment in a last mile distribution system	• Ongoing
<i>Klein Karoo (K2)</i>	
Support K2 marketing events to raise brand awareness/understand customer needs	• Ongoing
Work with K2 and marketing firm on gender/customer-centric promotional events	• Moved to Q3
Technical assistance on developing last mile distribution systems	• Ongoing
Pilot internship program setting up community agent networks	• Ongoing
<i>Luteari</i>	
Pilot internship program setting up community agent networks	• Ongoing
Understand/target needs of customers and develop customer database	• Moved to Q3
Technical assistance to design and test a last mile distribution system	• Ongoing
Track farmers using improved seeds and leverage information for testimonial events	• Moved to Q3
<i>Phoenix Seeds</i>	
Develop radio content to provide technical guidance and market its seeds, and gather customer feedback	• Completed
Partner with marketing firm to survey radio audience (incl. gender-disaggregated customer data), gain advice on and evaluate programming	• On hold
Invest in marketing tactics, including gender-disaggregated customer segmentation	• Cancelled
Invest in customer feedback mechanisms to build customer database	• On hold
Provide technical assistance on developing last mile distribution systems	• On hold
<i>Yara International</i>	

Q2 Planned Activity	End of Q2 Status
Support Yara to conduct a two-season marketing and promotional strategy	• Moved to Q3
Track farmers that are using Yara's fertilizer and leverage testimonials	• Moved to Q3
Recruit interns to run promotional events and provide technical advice	• Moved to Q3
<i>Other Input Agrodealers</i>	
Engage agrodealers to build customer databases to improve inventory/demand management	• Ongoing
Test a distribution network using community agents with two agrodealers	• Ongoing
Support input firm investments in improved customer segmentation	• Moved to Q3
Support investments in customer feedback mechanisms to build customer databases	• Moved to Q3
<i>Activities Across the Portfolio</i>	
Disseminate findings from the SHF Profiling Study and Gender Norms Study	• Moved to Q3
Host half-day workshop with input firms on learning/good practices on gender	• Moved to Q3
Supply Chain Management System	
<i>Condor Nuts</i>	
Procure traceability system	• Ongoing
Test Condor Nuts' traceability system in the cashew supply chain	• Moved to Q3
<i>Novo Madal</i>	
Define a transparent award mechanism to incentivize farmers	• Moved to Q3
Create feedback groups with male and female farmers to increase productivity	• Moved to Q3
Introduce a platform to share information on market prices and market demands with SHFs	• Moved to Q3
Develop performance-based management tactics, including incentives for SHFs	• Moved to Q3
<i>Miruku Agro-Industria</i>	
Develop performance management tactics, including incentives for SHFs	• Moved to Q3
<i>Mohammed enterprises Tanzania Limited (MeTL)</i>	
Develop performance-based production programs involving SHFs (e.g., female SHFs)	• Moved to Q3
<i>Mozambique Good Trade</i>	
Map consumer preferences on marketing/branding	• Moved to Q3
Explore marketing/branding improvements at end markets, testing "grown by women" brands	• Moved to Q3
Provide better technical advice to suppliers on volume/quality requirements	• Moved to Q3
<i>Other Commodity Buyers</i>	
Organize participatory meetings to link commodity buyers and market actors	• Ongoing
Pilot innovative dispute resolution mechanisms for incentive programs (1-2 partners)	• Moved to Q3
Interconnected Systems	
<i>Media</i>	

Q2 Planned Activity	End of Q2 Status
<i>Radio Sussundenga and Radio SIRT</i>	
Support Radio Sussundenga and Radio SIRT to sustain a content-driven feedback mechanism	• Moved to Q3
Explore partnerships with Radio Sussundenga/Radio SIRT and input companies to develop technical content aimed at improving farming	• Completed
Develop incentive programs with CRFs for farmers/market actors	• Moved to Q3
<i>Other Community Radio Stations</i>	
Scale up support for other community radio stations to sponsor improved content and a content-driven feedback mechanism	• Moved to Q3
Broker partnerships with partner community radio stations and input firms to obtain feedback on SHF concerns/queries	• Ongoing
Support community radio stations to develop promotions/marketing for input firms	• Ongoing
Support collection, analysis, and use of gender-disaggregated listener data through partnerships between CRFs and HEIs.	• Moved to Q3
Support radio station investments in feedback mechanisms (ICT, focus groups)	• Ongoing
Facilitate peer-to-peer mentorship among community radio stations	• Moved to Q3
Facilitate partnerships with CRFs and HEIs to build business skills with community radio stations	• Ongoing
Support CRFs to organize agricultural fairs linking market actors/ attracting sponsorships	• Ongoing
<i>Internship Program (Academia)</i>	
Work with HEIs to design a gender-sensitive internship program	• Ongoing
Adapt the internship program to add post-graduate students	• Ongoing
Host networking events to develop relationships between HEIs and local market actors for potential internships	• Ongoing
Host orientations with businesses prior to intern placement	• Ongoing
<i>Activities Across the Portfolio</i>	
Support replication of listener-based model by community radio stations	• Moved to Q3
Support linkages with community radio stations and agribusinesses to reach SHFs	• Ongoing
Pilot radio programming/female internships at radios to develop content targeting female-owned agribusinesses/SHFs	• Moved to Q3
Support Service System	
<i>Spraying Services/Crop Protection</i>	
<i>Isolmoc, Olam, Bayer</i>	
Support roll out of commercially viable professional spraying services	• Ongoing
Support customer segmentation/service customization to target SHFs (especially female SHFs and female head of households)	• Moved to Q3
<i>Ngala Investimentos</i>	
Support leveraging of other input service firms to expand spraying services	• Moved to Q3
Develop marketing tactics, such as customer segmentation/service customization	• Moved to Q3
<i>Other Spraying Services/Crop Protection Providers</i>	
Work with plastic container producers to strengthen capacity to recycle used containers for safe re-utilization	• Moved to Q3
<i>Mechanization</i>	

Q2 Planned Activity	End of Q2 Status
<i>Prodeca Sarl</i>	
Conduct research on mechanization, land preparation, and post-harvest technologies	• Ongoing
Undertake a needs and viability assessment and development of a marketing model for the services	• Moved to Q3
<i>Logistics</i>	
<i>Adicional</i>	
Explore opportunities to replicate the CdA inventory solution with other input firms	• On hold
<i>Market Services and Platform</i>	
<i>APROSE</i>	
Launch the seed award program and undertake the award ceremony	• On hold
<i>Mowoza</i>	
Co-design a virtual marketing platform to be piloted in northern Mozambique	• Moved to Q3
<i>Other Market Services and Platform Providers</i>	
Conduct discussion forums with input and output firms (CdA and local agrodealers)	• Ongoing
Support promotional events to pitch service offers and build alliances between service providers and agribusinesses	• Moved to Q3
Assess the viability of multi-user irrigation programs and assist in designing a program through training and on-the-job coaching	• Completed
<i>Activities Across the Portfolio</i>	
Raise profiles of service providers offering support services to expand outreach	• Moved to Q3
Business Service System	
<i>Financial Services</i>	
<i>Hollard Agri</i>	
Explore partnership with Hollard Agri on weather insurance product	• Ongoing
<i>Letshego</i>	
Engage Letshego to expand innovative financial services	• Moved to Q3
<i>BCI</i>	
Explore opportunities in trader finance and in-store credit options for input firms	• Ongoing
<i>Vodacom (M-Pesa)</i>	
Work with Vodacom (M-Pesa) to explore financial services/ incentives for SHFs	• Ongoing
Explore promoting domestic remittances for input purchases	• Moved to Q3
<i>Other Financial Service Providers</i>	
Facilitate stakeholder forums with financial providers (microfinance/commercial banks)	• Moved to Q3
Build market actor financial capacity through supplier/customer credit schemes	• Moved to Q3
Work with financial providers (microfinance and commercial banks) to customize financial services/products, specifically credit to SHFs	• Moved to Q3
<i>ICT Services</i>	

Q2 Planned Activity	End of Q2 Status
Support firms/organizations (UX, Idealab, AMPETIC) to organize ICT forums	• Ongoing
Support firms (UX, Idealab) to identify/test/scale business accelerators/incubators for ICT solutions in agriculture	• Moved to Q3
Survey databases to identify data for market actors to conduct consumer research/marketing campaigns	• Ongoing
Marketing Services	
<i>Tangerine</i>	
Sign agreement to help agrodealers develop marketing and branding strategies	• Ongoing
Test feasibility of establishing locally based agricultural team to provide hands on marketing services	• Ongoing
<i>Other Marketing Service Providers</i>	
Conduct learning events/provide tools on marketing tactics targeting SHFs	• Ongoing
Engage marketing and research firms in consumer-focused research	• Ongoing
Support development of bottom of the pyramid master classes	• Ongoing
Activities Across the Portfolio	
Sponsor sharing/ networking events to pitch service offers/ build linkages with service providers and agribusinesses	• Moved to Q3
MEL	
Consolidate and devise a "menu" of innovations to probe	• Ongoing
Use the Health System tools for planting season FY18	• Ongoing
Utilize qualitative data methods to assess behavior/expectation shifts	• Moved to Q3
Determine effectiveness of current workflows/systems/tools/platforms	• Ongoing
Progress on theory of change in quarterly review and reports	• Ongoing
CLA	
Host coordination meeting with other FTF activities	• Ongoing
Exchange information and learning with other USAID activities/donor programs	• Ongoing
Share lessons learned with other implementing partners (i.e. Market Systems Development Network)	• Ongoing
Online training on results measurement using Donor Committee for Enterprise Development Standard	• Moved to Q3
Results measurement for sustainable private sector development (Bangkok)	• On hold
Research	
Map key system characteristics	• Moved to Q3
Radical/incremental adoption of technologies (European University)	• Moved to Q4
Study on financial behavior and needs of SHFs	• Completed
Measure effectiveness of pilot CRF programs	• Completed
MEL research on outcomes of evidence-based probes	• Moved to Q4
Study on MEL approach	• Completed
Ad hoc research pieces identified during implementation of Deal Notes	• Ongoing

Q2 Planned Activity	End of Q2 Status
FTF RAMA-Nacala Irrigation study	• Completed
Communications	
Develop a Communications Plan that outlines key partners, audiences, messages, and tools for implementation	• Ongoing
Develop materials for a monthly internal newsletter	• Ongoing
Conduct quarterly and annual reporting to USAID	• Ongoing
Develop marketing materials and videos to educate potential partners on MSD approach	• Ongoing
Provide regular updates on market change and opportunities	• Ongoing
Develop key messages to amplify successful partner experiences	• Ongoing
Develop content to amplify messages from each technical portfolio	• Ongoing
Management and Operations	
<i>Human Resources</i>	
Continue to provide support to FTF Inova functions (recruit short-term consultants, coordinate MSD training, meet labor and legal obligations, update policies and procedures)	• Ongoing
Assist partners with award and incentive systems that establish standard performance measures	• Ongoing
Support the design, management, and implementation of the internship program	• Ongoing
<i>Procurement</i>	
Continue to meet the requirements of the FTF Inova Activity (support quality, cost-effective and targeted procurements)	• Ongoing
Provide guidance to partners on market scoping and research activities (identifying pre-selected vendors, conducting expressions of interest, etc.)	• Ongoing
Assist with the onboarding of vendors and partners in procurement processes	• Ongoing
<i>Administration</i>	
Continue to support FTF Inova operations and the partners (logistics for project events and travel, general project facilities management)	• Ongoing
Assist partners develop logistics and fleet management systems	• As needed
Assist partners develop inventory and stock management (Input Distribution Network System)	• As needed
<i>Finance</i>	
Support FTF Inova Activity with internal and external financial reporting	• Ongoing
Support FTF Inova in development of Deal Notes, grant budgets, and financial monitoring of the Deal Notes and grants	• Ongoing
Continue support on project financial reporting (monthly financial reporting, quarterly value-added tax report, annual accruals, annual income tax reporting)	• Ongoing

6.2 List of Q3 2019 Planned Activities

Table 4: List of Activities Planned for Q3 2019

Q3 Planned Activity

Technical Activities

Input Distribution Network System

Agro-Imbeu Parque e Máquinas (AIPM)

Redesign AIPM's brand and packaging to appeal to more SHFs

Work with AIPM and marketing research firm to understand SHF preferences

Casa do Agricultor (CdA)

Continue to invest in targeted marketing tactics

Work with CdA and marketing firm (remodel shop/review marketing materials)

Support CdA's investment in a last mile distribution system

Klein Karoo (K2)

Support K2 marketing events to raise brand awareness/understand customer needs

Work with K2 and marketing firm on gender/customer-centric promotional events

Promote gender-disaggregated CRM systems based on K2 experience

Technical assistance on developing last mile distribution systems

Pilot internship program setting up community agent networks

Luteari

Pilot internship program setting up community agent networks

Understand/target needs of customers and develop customer database

Technical assistance to design and test a last mile distribution system

Track farmers using improved seeds and leverage information for testimonial events

Phoenix Seeds (activities on hold pending results of quick assessment)

Partner with marketing firm to survey radio audience, gain advice on and evaluate programming

Invest in customer feedback mechanisms to build customer database

Provide technical assistance on developing last mile distribution systems

Yara International

Support Yara to conduct a two-season marketing and promotional strategy

Track farmers that are using Yara's fertilizer and leverage testimonials

Recruit interns to run promotional events and provide technical advice

Other Input Agrodealers

Engage agrodealers to build customer databases to improve inventory/demand management

Test a distribution network using community agents with two agrodealers

Identify agrodealers to test a guarantee scheme to manage risks/extend credit

Support input firm investments in improved customer segmentation

Activities Across the Portfolio

Work with current partners to raise their profile/amplify successes

Q3 Planned Activity

Disseminate findings from the SHF Profiling Study and Gender Norms Study
Host half-day workshop with input firms on learning/good practices on gender

Supply Chain Management System

Condor Nuts

Procure traceability system
Test Condor Nuts' traceability system in the cashew supply chain
Establish an incentive system that rewards more productive SHFs and intermediaries

Novo Madal

Define a transparent award mechanism to incentivize farmers
Create feedback groups with male and female farmers to increase productivity
Introduce a platform to share information on market prices and market demands with SHFs

Miruku Agro-Industria

Develop performance management tactics, including incentives for SHFs

Mohammed enterprises Tanzania Limited (MeTL)

Develop performance-based production programs involving SHFs (e.g., female SHFs)

Mozambique Good Trade

Map consumer preferences on marketing/branding
Explore marketing/branding improvements at end markets, testing Mozambican local brands
Provide better technical advice to suppliers on volume/quality requirements

Other Commodity Buyers

Foster alliances/partnerships between seed companies and outgrowers to promote use of SHFs, especially female SHFs
Organize participatory meetings to link commodity buyers and market actors
Work with local service providers to scale up performance-based mechanisms with commodity buyers
Pilot innovative dispute resolution mechanisms for incentive programs (1-2 partners)
Test alternative sales channels (input firms as aggregators) to link the input business cycle with the buying cycle

Activities Across the Portfolio

Explore synergy between innovations in ICT and supply chain management

Interconnected Systems

Media

Radio Sussundenga and Radio SIRT

Support Radio Sussundenga and Radio SIRT to sustain a content-driven feedback mechanism
Develop incentive programs with CRFs for farmers/market actors

Other Community Radios

Q3 Planned Activity

Scale up support for other community radio stations to sponsor improved content and a content-driven feedback mechanism

Broker partnerships with partner community radio stations and input firms to obtain feedback on SHF concerns/queries

Support community radio stations to develop promotions/marketing for input firms

Support collection, analysis, and use of gender-disaggregated listener data through partnerships between CRFs and HEIs.

Support radio station investments in feedback mechanisms (ICT, focus groups)

Facilitate peer-to-peer mentorship among community radio stations

Facilitate partnerships with CRFs and HEIs to build business skills with community radio stations

Support CRFs to organize agricultural fairs linking market actors/ attracting sponsorships

Internship Program (Academia)

Work with HEIs to design a gender-sensitive internship program

Adapt the internship program to add post-graduate students

Host networking events to develop relationships between HEIs and local market actors for potential internships

Host orientations with businesses prior to intern placement

Conduct internship review sessions with market actors

Support HEIs to evaluate market actor feedback/incorporate feedback into the curriculum

Connect entrepreneurial students with support resources

Activities Across the Portfolio

Support replication of listener-based model by community radio stations

Support linkages with community radio stations and agribusinesses to reach SHFs

Pilot radio programming/female internships at radios to develop content targeting female-owned agribusinesses/SHFs

Conduct research on other internship models/post-internship opportunities

Support Service System

Spraying Services/Crop Protection

Isolmoc, Olam, Bayer

Support rollout of commercially viable professional spraying services

Support customer segmentation/service customization to target SHFs (especially female SHFs and female head of households)

Ngala Investimentos

Support leveraging of other input service firms to expand spraying services

Develop marketing tactics, such as customer segmentation/service customization

Other Spraying Services/Crop Protection Providers

Work with plastic container producers to strengthen capacity to recycle used containers for safe re-utilization

Mechanization

Prodeca Sarl

Q3 Planned Activity

Conduct research on mechanization, land preparation, and post-harvest technologies

Undertake a needs and viability assessment and development of a marketing model for the services.

Other Mechanization Service Providers

Engage mechanization service providers to integrate service offers with supply chain firms/input firms

Logistics

AppLoad

Support logistics application pilot on a promotional basis with CdA

Adicional

Explore opportunities to replicate the CdA inventory solution with other input firms

Market Services and Platform

APROSE (on hold to determine next steps)

Launch the seed award program and undertake the award ceremony

Mowoza

Co-design a virtual marketing platform to be piloted in northern Mozambique

Other Market Services and Platform Providers

Conduct discussion forums with input and output firms (CdA and local agrodealers)

Support promotional events to pitch service offers and build alliances between service providers and agribusinesses

Assess the viability of multi-user irrigation programs and assist in designing a program through training and on-the-job coaching

Activities Across the Portfolio

Raise profiles of service providers offering support services to expand outreach

Business Service System

Financial Services

Hollard Agri

Explore partnership with Hollard Agri on weather insurance product

Letshego

Engage Letshego to expand innovative financial services

Vodacom (M-Pesa)

Work with Vodacom (M-Pesa) to explore financial services/ incentives for SHFs

Explore promoting domestic remittances for input purchases

Other Financial Service Providers

Facilitate stakeholder forums with financial providers (microfinance/commercial banks)

Work with financial providers (microfinance and commercial banks) to customize financial services/products, specifically credit to SHFs

Build market actor financial capacity through supplier/customer credit schemes

Q3 Planned Activity

ICT Services

Support firms/organizations (UX, Idealab, AMPETIC) to organize ICT forums

Support firms (UX, Idealab) to identify/test/scale business accelerators/incubators for ICT solutions in agriculture

Survey databases to identify data for market actors to conduct consumer research/marketing campaigns

Marketing Services

Tangerine

Sign agreement to help agrodealers develop marketing and branding strategies

Test feasibility of establishing locally based agricultural team to provide hands on marketing services

Conduct mystery shopper assessments in key regions

Develop offers to support marketing campaigns/promotional events for grown in Mozambique brands

Other Marketing Service Providers

Conduct learning events/provide tools on marketing tactics targeting SHFs

Engage marketing and research firms in consumer-focused research

Support development of bottom of the pyramid master classes

Activities Across the Portfolio

Sponsor sharing/ networking events to pitch service offers/ build linkages with service providers and agribusinesses

MEL

Consolidate and devise a "menu" of innovations to probe

Conduct an SHF impact evaluation using catchment area technique

Conduct an internal data quality assessment

Ensure quality data requests are addressed with business case

Utilize qualitative data methods to assess behavior/expectation shifts

Determine effectiveness of current workflows/systems/tools/platforms

Progress on theory of change in quarterly review and reports

CLA

Host coordination meeting with other FTF activities

Exchange information and learning with other USAID activities/donor programs

Share lessons learned with other implementing partners (i.e. Market Systems Development Network)

Market System Symposium – (Cape Town, South Africa)

Online training on results measurement using Donor Committee for Enterprise Development Standard

Results measurement for sustainable private sector development (Bangkok) (on hold)

Research

Map key system characteristics

Q3 Planned Activity

Research on nonfinancial incentives to stimulate SHF participation

Ad hoc research pieces identified during implementation of Deal Notes

Communications

Develop materials for a monthly internal newsletter

Conduct quarterly and annual reporting to USAID

Develop marketing materials and videos to educate potential partners on MSD approach

Provide regular updates on market change and opportunities

Develop key messages to amplify successful partner experiences

Participate in conferences and workshops to disseminate project-related experiences and knowledge

Develop content to amplify messages from each technical portfolio

Management and Operations

Human Resources

Continue to provide support to FTF Inova functions (recruit short-term consultants, coordinate MSD training, meet labor and legal obligations, update policies and procedures)

Assist partners with award and incentive systems that establish standard performance measures

Support the design, management, and implementation of the internship program

Procurement

Continue to meet the requirements of the FTF Inova Activity (support quality, cost-effective and targeted procurements)

Provide guidance to partners on market scoping and research activities (identifying pre-selected vendors, conducting expressions of interest, etc)

Assist with the onboarding of vendors and partners in procurement processes

Administration

Continue to support FTF Inova operations and the partners (logistics for project events and travel, general project facilities management)

Assist partners develop logistics and fleet management systems

Assist partners develop inventory and stock management (Input Distribution Network System)

Finance

Support FTF Inova Activity with internal and external financial reporting

Support FTF Inova in development of Deal Notes, grant budgets, and financial monitoring of the Deal Notes and grants

Continue support on project financial reporting (monthly financial reporting, quarterly value-added tax report, annual accruals, annual income tax reporting)

Annex I: Lessons Learned

INTRODUCTION OF PROFESSIONAL SPRAYING SERVICES PROMISES IMPROVEMENTS IN COTTON PRODUCTION

Pests are a major problem in cotton production in Mozambique. Pest control in cotton is usually conducted by the cotton farmers, who receive insecticides and spraying equipment from the concessionaire. However, farmers are not usually trained to spray their own field, putting them at risk of exposure to toxic chemicals and environmental contamination. To address these risks, FTF Inova facilitated a partnership between Bayer, *Isolmoc*, and Olam to introduce innovative professional spraying services for cotton fields. The professional spraying service innovation aims to increase smallholder farmer productivity by using high-quality agrochemicals while concurrently reducing smallholder farmers' exposure to toxic products. Ultimately, the pilot will create demand and capacity for commercial professional spraying services at a local level.



Judite Romola, Local Coordinator, OLAM in Nampula

Olam, a leading agribusiness that manages a cotton concession with more than 20,000 cotton farmers in Nampula Province, sought to pilot professional spraying services to address the poor agronomic practices and inefficient application of chemicals that have resulted in low productivity on their cotton farms. Under Olam's previous approach, Olam delivered, and smallholder farmers individually applied, the agrochemicals. However, the agrochemicals were often handled without proper care, risking health concerns and were often diverted, diluted or used on other crops.

“This training provided us with technical skills that besides benefiting cotton producers, enables us to become a local solution for other agricultural issues in our community. I was only a farmer and now I see myself as a service provider too.”

—Júlio Cavala, a professional spraying service provider involved in the initiative

The pilot targets approximately 2,200 smallholder farmers who farm about 2,000 hectares in the districts of Lalaua and Ribaué in Nampula Province. Through the new partnership, the three firms—Bayer, *Isolmoc* and Olam—operate as part of a framework. Bayer provides the chemicals and conducts crop protection training on chemical handling, safety gear requirements, spray techniques, sprayer calibration, and sales and marketing. *Isolmoc* distributes the chemicals, manages the spraying service providers, and ensures that spraying service providers are servicing farmers. And Olam provides information on the farmers and oversees the plots.

As of February, 160 local farmers were trained to become spraying service providers. Farmers also had access to other training on crop husbandry to help them better understand the local farming systems and farmers, to whom they are providing professional quality spraying services. The aim of the newly-trained, independent service providers is to offer a value-added service by sharing expertise on cotton farming and other crops. Out of the 160 trained farmers, 97 were hired to offer local farmers a package of six spray applications for a total of 2,056 hectares over a six-month period.



Cotton field before (left) and after (rights) spraying

During the initial roll out, the partners encountered some areas for improvement—identifying the size and coverage of the fields being sprayed, pricing of the services, and transportation and incentives for the spraying service providers—that they are trying to address as the issues arise. For example, to ensure farmers are getting the full value of the services they are paying for, partners will need to confirm that the size of the plots being sprayed are priced accordingly and that spraying service providers are providing the full treatment. Partners are also taking actions to alleviate transportation challenges and motivate spraying service providers by offering bicycles on credit, increasing the financial compensation to motivate sprayers, designing an awards program recognizing best performers and providing certificates of competence.

Despite the challenges, the innovation is showing promising results. While it is still early in the pilot, farmers are starting to see a difference in their crops after three rounds of spraying. According to Lassimu Nausto, a cotton farmer from Lalaua, “I can see that plants are growing stronger. Usually I get two capsules per plant and this year, most of the plants have an average of four to five capsules.”



Pedro Augusto Agro Account Manager-Isolmoc

The partners are also pleased with the model. According to *Isolmoc* Agro Account Manager, Pedro Augusto, “this approach guarantees that the application of chemicals follows the requirements both in terms of handling and schedules of the six treatments per season.” For Olam, it represents a value-add proposition in terms of management. According to Judite Romola, a local coordinator from Olam, “this format enables us to focus on other areas. Previously we had to deal with the logistics involved in the distribution of chemicals. Having a partner company responsible for the chemical reduces the pressure so that we can focus on our core business.”