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SUSTAINABLE LAST MILE INPUT DISTRIBUTION FTF INOVA

Using a market systems approach, FTF Inova has partnered with the private sector to develop sustainable models for last mile input distribution in Mozambique.

Agricultural markets in Mozambique are thin, with few or nonexistent supporting services. While the agriculture sector is saturated with donors providing direct support and substantial grants to agriculture, FTF Inova takes a different approach. The project is supporting interested private sector input distribution companies to develop sales models – for seeds, fertilizers, and chemicals – that can reach the “last mile” with both products and services, sustainably and profitably. Through a market systems approach, FTF Inova is facilitating systemic shifts in interactions and transactions between market actors, reorienting business strategies from a narrow focus on short-term profit and spot transactions to one that emphasizes long-term business relationships, enhancing growth and shared value.

FTF Inova is demonstrating how input distribution companies can reach the last mile by making money *with* farmers, not simply from them.

Now in its third year of five, FTF Inova is seeing clear signs that the innovations it has introduced to the agricultural input distribution system can be scaled without prolonged donor assistance. Through market facilitation, FTF Inova is fostering change that will lead to the broad adoption of these innovations in the market:



With FTF Inova’s support, three “last mile” sales models for agriculture inputs have been piloted: (1) village-based agents (VBAs), (2) fixed schedule delivery service using a mix of orders and cash-based sales, and (3) spraying services bundled with the sale of pesticide. Described in more detail below, these sales models are showing early signs of being able to catalyze broad system changes that will improve last mile availability of agriculture inputs, competitiveness, and inclusivity in Mozambique.

THE VILLAGE-BASED AGENT (VBA) MODEL

Village-based agents are community-based, commercial agents who provide a link between input firms and farmers and are a useful channel to share information on products and services, which helps farmers to adopt improved practices. The VBA model is especially useful in Mozambique because last mile farmers are so marginalized, disconnected from markets, and limited in their ability to access to inputs and information to improve their yields.

Late in 2017, FTF Inova met with private sector input supply companies and briefed them on the VBA model, emphasizing that it required little upfront investment to establish but could result in a large increase in sales if managed properly. As part of this presentation, FTF Inova also offered to assist any interested company to establish a network of VBAs, along with the system and approach needed to manage the network that was established.



Luteari Inputs and Agricultural Services, Ltd. (Luteari), based in Chimoio, was the first company to take advantage of the offer, though others, including Klein Karoo Seed Marketing, Ltd. (K2) and Cantina 2001, were soon to follow. Through a series of co-creation meetings with each interested firm, deal notes that outlined the commitments related to the establishment of a VBA network were negotiated between the firm and FTF Inova. Once deal notes were signed and in place, for much of 2018, FTF Inova assisted with the establishment of VBA networks and systems for each partner firm. The project helped to conduct marketing and product promotion meetings in targeted communities – meetings that were also used to assess whether the community wanted an agent and, if so, for the village to nominate candidates. The VBA model shows early signs of working well. The 26 active village-based agents in the pilot reached 849 people and averaged \$193 in sales. In the first quarter of 2019, village-based agents represented 85 percent of Luteari’s total sales, versus 32 percent in the previous quarter, and since establishing a VBA network, agro-dealers in the District of Barue’ have increased their sales by 45 percent.

Once agents were nominated by the communities, FTF Inova assisted partner firms to train them. Training content included customer service, basic information about the inputs on offer, the process for sales and delivery, and basic marketing techniques. With guidance from FTF Inova, each partner firm designed a set of performance incentives for agents, in line with the goal of promoting community satisfaction. Throughout training, it was emphasized to prospective agents that they would not be full time, salaried, or permanent, but that they would be eligible for both financial (eg. commission on sales) and non-financial (eg. t-shirts to represent the company) performance incentives. At the end of the training, based on their performance, the best candidates were made official agents, under a 45 to 90-day probationary period.

After the first round of training, partner firms conducted subsequent rounds on their own, though FTF Inova continued to closely monitor, mentor, and coach each partner as they train candidates and broaden their network of village-based agents. In addition, FTF Inova assisted partner firms to establish clear agent management practices, including regular agent meetings, agent register books, opportunities for peer-to-peer discussions, as well as other support mechanisms.



Following the successful pilots, in May 2019, FTF Inova began working with its private sector partners to expand the use of the VBA sales model to Nampula Province. Interns from UBS and other technical training institutions in Nampula are helping to establish VBA networks with three new input distribution partners, including Casa do Agricultor (CdA), which already has plans to adapt the VBA model to leverage its existing retail network of Casa do Agricultor shops. Additionally, the project is in early discussions with two processing firms, Miruku and MeTL Milling, along with agro-dealers that operate in the production areas where the two firms source agricultural goods. Other development projects and organizations, such as Inovagro and iDE, have expressed interest to learn from and partner with Inova on the rollout of the last mile VBA distribution model. In addition, FTF Inova is in discussions with Unilirio University to support the development of materials for interns to support the rollout of the VBA model at scale – including to agro-dealers working with other development partners.

THE FIXED SCHEDULE SERVICE DELIVERY MODEL

Beginning in January 2019, as part of its mission to become a one-stop-shop for agricultural inputs, FTF Inova's partner, CdA, began piloting a fixed schedule delivery service based on a mix of orders and cash-based sales to smallholder farmers in the rural areas of Manica Province. In the beginning, the deliveries were scheduled to happen monthly. However, based on the rapid sales growth on these routes, CdA now services the four delivery routes in Manica on a weekly basis while expanding to Tete and Cabo Delgado. In the pilot phase in Manica, a total of 152 trips were made, serving 60 agro-dealers, reaching over 5,000 farmers, and selling nearly 4.6 million Meticals (\$75,662) in inputs.

The management and operation of the fixed schedule delivery service is simple. Four times per week, a truck loaded with agricultural inputs from multiple brands leaves CdA's provincial headquarters in Chimoio. Reaching the same locations on the same day each week makes delivery predictable for customers. The inputs are sold on four different routes – Manica/Machipanda, Nhamatanda, Sussundenga, and Catandica. A *WhatsApp* group keeps CdA's head office in Maputo, and provincial office in Chimoio, apprised of the truck's location, orders, and sales. The *WhatsApp* group also provides CdA

with a valuable feedback loop, letting the company know, in real time, what farmers want, what they are buying and not buying, and what challenges, such as pests, they are facing.

After one year, results from the fixed schedule service delivery model are very encouraging. The volumes sold on the four distribution routes have been consistently growing and at a faster pace than expected – overall sales on CdA’s fixed schedule distribution routes have grown by 90%, and the company has recorded an average monthly sales growth rate of 30%.



CdA has already calculated that two of the four routes are fully sustainable, able to cover the cost of renting a truck if needed. CdA is now fully committed to invest in expanding the fixed schedule service delivery model and push further into the last mile, recognizing that this is a strategic growth area for the company. To achieve this, in consultation with FTF Inova, CdA has recently hired a new senior staff member to drive the expansion of the last mile distribution routes. In addition, CdA is interested in partnering with input supply companies, such as K2, to align CdA’s service delivery with areas where other companies have established VBA networks.

Moving forward, FTF Inova will assist CdA to pilot the fixed schedule service delivery model in Nampula and other provinces. In addition, FTF Inova will assist more input companies to partner with CdA to leverage the fixed schedule delivery service, including new linkages with VBA networks.

THE SPRAYING SERVICE MODEL

In December 2018, FTF Inova partnered with Olam International, an international agribusiness that sources from over 4.8 million farmers globally; Bayer; and Isolmoc, a local distributor new to the agriculture sector. With FTF Inova as facilitator, the partnership focused on the cotton sector in Nampula Province, where Olam holds a concession in cotton. As a concession holder, Olam is required to provide cotton farmers with all required inputs, one of which is agrochemical pesticides. In the past, farmers were provided generic chemicals directly from Olam, but those under the partnership facilitated by FTF Inova were given more effective, though more expensive, brand name pesticides from Bayer, distributed by Isolmoc.



Ninety-seven farmers were identified to provide spray services in their areas, and Isolmoc managed the service provision, with each spray application costing 40 meticaís. Three sprayings were required and a further two to three were highly recommended (totaling 5-6). Over the course of the growing season in 2019 –planting in January and February and offtake between June and August – 2,377 farmers in the pilot districts of Ribaue and Lalaue elected to use the Bayer pesticide product and were offered spraying services, the cost of which was also provided on credit. 2,020 hectares of cotton were sprayed, with Isolmoc reaching US\$92,037. 59 in sales Olam allowed farmers to opt out of the spraying service, if the farmers didn’t feel it was worthwhile. Significantly, 335 farmers (17%) applied the recommended 5-6 sprayings. Initial analysis of these early adopters shows yields of 800 kg/ha or greater, doubling or even tripling previous yields.

For the next growing season, FTF Inova is already discussing with Olam and Isolmoc ways to improve last mile farmers access to, and use of, better quality agricultural inputs, which will include expanding the provision of embedded spraying services to the 41,000 farmers that Olam works with in the cotton

sector in Mozambique. In addition, FTF Inova has begun working with Ngala Investments (Ngala), a diversified agro-dealer in Nampula Province that offers spraying services in the cashew sector. Because there is no concessionaire in the cashew sector and the crop is largely exported, different incentives, such as the traceability demanded by Western markets, can be leveraged for more sales in cash up front, new packages of pesticides for crops other than cashews or cotton, and new market linkages to a cashew processor such as Condor, for example. In addition, Isolmoc intends to add products to the items it distributes, including maize seeds and chemicals for crops such as sesame and cashew.

GETTING TO SCALE

As demonstrated by early findings in each of the above sales models, the engagement of private sector partners to reach the last mile of input distribution in Mozambique is showing great promise of being both impactful *and* sustainable. Moving forward, FTF Inova will continue to facilitate the emergence of other business innovations leading to sustainable transformational change. FTF Inova has already negotiated a solid portfolio of activities with 34 partners—and is systematically testing – probing – more than 20 catalytic innovations spanning all five market system areas: input distribution, supply chain management, support services, business services, and interconnected systems. Over the next two years, FTF Inova will adapt its activities to support and scale the probes that show the most promising results for sustainable systemic impact.