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

FEED THE FUTURE UGANDA INCLUSIVE AGRICULTURAL MARKETS ACTIVITY

CATALYZING DEMAND FOR QUALITY IN UGANDA THROUGH PROCESSED FOODS CERTIFICATION

ABSTRACT

Despite the notion that consumers invariably purchase healthy, certified quality food which enables farmers to earn higher prices, the food industry in Uganda is weakly regulated and characterized by low-quality standards for grain and milled flours. Agro processors are starting to comply with the Uganda National Bureau of Standards (UNBS) food regulations by attaining its Quality Mark (Q-Mark) certificate, but markets are not always willing to pay more for certified food and consumers do not know the difference between Q-Mark certified flour and flour labeled "super" for marketing purposes that is uncertified and unregulated. FtF IAM's vision for agro processing is to see cereal processors produce competitive, value-added, food that is safe, certified, and meets high-value market requirements. In turn, this will drive demand for quality raw materials and incentivize buyers and aggregators to develop longer-term relationships that reduce risk and improve quality management in the supply chain. It will also improve nutrition and reduce consumption of unsafe processed foods.

In July 2022, the Activity conducted a study of 33 agro processors to assess the impact of Sector Wide Training (SWT) and customized technical assistance (TA) that it offered through local partners. The study assessed the interest in quality standards certification, actions, and upgrades or investments made by processors towards producing safe and certified foods. The study revealed that addressing inefficiencies in the milling process reduces production costs while sourcing and maintaining quality grains increases chances of non-rejected products. This translates into higher sales and profits, despite competitive prices and low margins. In the long-term, with the emergence of self-regulating industry associations and a more informed market, agro processors expect price to play a key role in motivating processors to seek certification.

About FTF IAM

The Feed the Future Uganda Inclusive Agricultural Markets Activity (FtF IAM or the "Activity") is a five-year market systems development activity (2019-2024) funded by the United States Agency for International Development (USAID) and implemented by DAI Global, LLC in partnership with TechnoServe Inc. (TNS) and MarketShare Associates (MSA). The purpose of the Activity is to increase incomes and improve the livelihoods of households through agricultural-led inclusive economic growth, targeting 38 FtF districts in Northern, Western, and Eastern Uganda. The Activity contributes to the Global Food Security Strategy (GFSS) Uganda Country plan goal of reducing hunger, malnutrition and poverty and the USAID/Uganda Country Development Cooperation Strategy (CDCS 2016-2021) goal of strengthening Uganda's systems to accelerate inclusive education, health, and economic outcomes.

FtF IAM works through market actors to build capacity and enable them to respond to opportunities in the agricultural sector. The approach empowers local actors, especially the private sector, government, and producer groups, building their capacity and de-risking the use of new business models and technologies. FtF IAM places women, youth, and other marginalized groups at the core of its strategies and focuses on creating efficiencies in market functions that have sustainable impact on the agricultural sector and the country.

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BACKGROUND

In September 2021, FtF IAM facilitated Food Safety Associates (FSA), Partners in Food Solutions (PFS), and UNBS to conduct regional-based trainings with 100 representatives from micro, small and medium cereal milling facilities in the Eastern, Western and Northern regions of Uganda. SWTs build capacity and served as awareness creation platforms that cover sector-specific themes or topics and target a wide range of processors. In this case, the SWTs created awareness on cereal standards, recommended practices (good hygienic and good manufacturing practices), and discussed growing demand for high-quality processed food markets. The SWTs aimed to reinforce the processors' capacity to invest in facility upgrades, among other requirements for acquiring UNBS certification. The timing coincided with UNBS increasing enforcement of regulations against uncertified mills, including closing mills, confiscation of products, and fines.

FtF IAM designed the SWTs as a tool to evoke the processors' interest in certification and build demand for consulting services among processors from companies like FSA and local consultants known as Consultant Service Providers (CSPs). Following the SWTs, FtF IAM partners offered tailored technical assistance to 17 processors and CSPs trained an additional 18 processors while being mentored by FSA. The CSPs have adapted FSA's commercialized service packages to offer locally available and affordable certification consulting services to processors. FtF IAM then conducted regional food processors' learning events to further discuss sector best practices and crowd in demand for certification from processors who did not participate in SWT and may not have yet acquired the UNBS Q-Mark.

This learning brief shares findings from the SWT trainings and participant tracer study that obtained feedback from directors, Chief Executive Officers (CEOs) and managers from 33 cereal processing facilities. Most interviewees (46 percent) were in Eastern Uganda (Elgon and Bukedi), the others were equally from Northern (Acholi & Lango) and Southwestern regions (Ankole,



The Manager at Medi and Sons Millers taking stock at their premises in Mbale Industrial Area- Eastern Uganda. Photo: Dorothy Nabatanzi

Kigezi and Tooro). Most processors (70 percent) were maize millers, 30 percent milled rice, sunflower or sorghum, and all milled other crops like millet and cassava.

This learning brief further provides insights on the benefits accrued by processors that upgraded their facilities, implemented the recommended standards, and/or attained certification. It also highlights how the SWTs that customized TA and increased standards' compliance regulation have independently or collectively contributed to enabling processors to produce certified foods, and what more can be done to support processors on the pathway to attaining certification.

SWT OUTCOMES

This section analyzes the SWTs' impact on the demand for certification and provides insights on the additional support needed by processors to enhance

adoption of recommended practices, investment in upgrades, and attainment of certification at greater scale and sustainability.

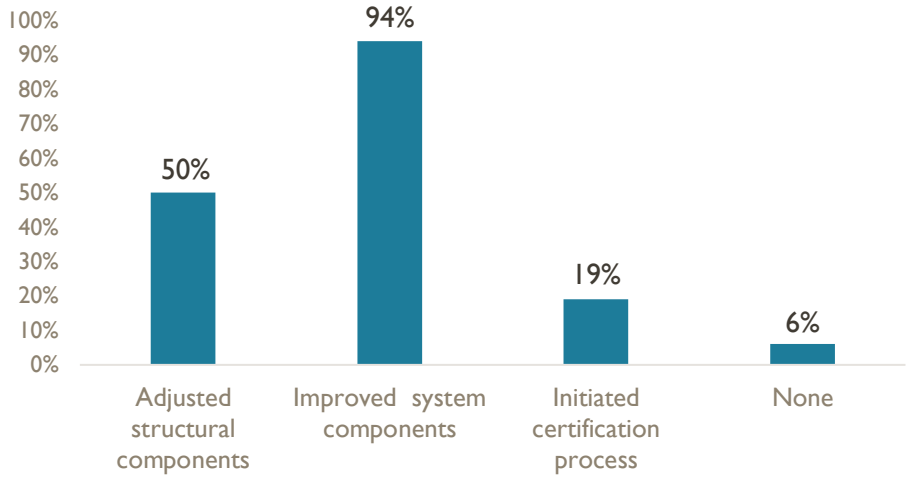
SWTs evoked processors' interest in certification

The SWT tracer study shows that 88 percent of the processors gained interest in attaining certification after attending the SWTs. Prior to participating, over 90 percent of processors who attended the training did not know the cereal standards and requirements for the Q-Mark certification. The learning events that followed further confirmed that the SWTs were useful. For example, millers such as Samelo Foods, Mikagy Millers, and Anne Millers affirmed that SWTs helped them to embark on the certification journey. For others like Manya Millers and Medi & Sons Special Millers, the SWTs enabled them to restart the journey they had long given up on.

Actions taken after SWT

Nine months after the SWT, almost all processors (94 percent) had improved systems components[1] by enhancing sanitation and hygiene of facilities and personnel as well as building staff capacity to implement recommended practices. Fifty percent of processors adjusted structural components of their facilities, including renovating the premises, improving maintenance and management of machinery and equipment, and buying new machinery. Structural adjustments are often more expensive than systems adjustments, which is likely why fewer improved their structures and equipment, but most improved their systems at a minimum. Nineteen percent of processors initiated the certification process, while the rest felt they still had a lot of actions to take before applying. The processors that did not take any action (6 percent) had redundant facilities. due to high prices or scarcity of raw materials (maize, sorghum, and rice), and were not processing. See Figure 1 Action Taken After SWT.

Figure 1. Actions Taken After SWT



In Southwestern Uganda, where there are no millers' associations, one of the processors from Kasese mobilized millers in the area to form the Kasese Millers Association after attending the SWT. The purpose of the association is to lobby for collective access to production resources (power, certification services, food quality training, land, etc.). Through the association's collective action, all members' premises have been inspected and samples have been drawn by UNBS for testing, awaiting laboratory results.

The Activity saw no correlation between the size of the mill and the after-actions taken but did observe regional differences in after-actions taken. In the Eastern region, all of the processors made adjustments after the SWT,

[1] Systems components include personal hygiene system, cleaning, sanitizing, sanitation and waste control system, raw material control system, storage Systems, operational features control systems, labeling and packaging systems, audit/documentation and records system, transport and dispatch system, and training system.

with 80 percent going beyond systems upgrades to investing in structural improvements and pursuing certification as compared to 44 percent and 33 percent of processors in the Western and Northern regions, respectively. This could be associated with the customized TA received by processors as all processors (100 percent) in the Eastern region received customized TA from FSA or CSPs compared to 44 percent and 55 percent of the processors in the Northern and Western regions, respectively. In addition, there were varying levels of enforcement by UNBS, which is also attributed to actions taken after the SWT. UNBS shut down more mills in the Eastern region, a major milling hub. In western Uganda, FSA and processors reported that UNBS was harder on the medium-scale millers than on micro and small millers, which creates unfair competition. In the Northern region, political pressure on UNBS led to the reopening of non-conforming mills.

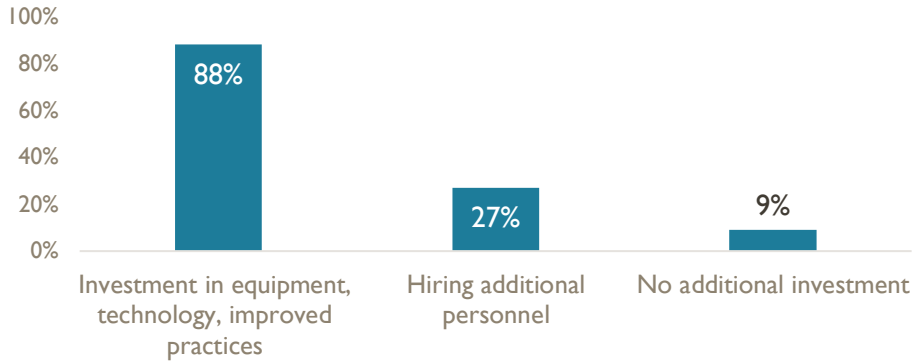
Investments made after SWT

Eighty-eight percent of agro processors who attended the SWT made investments amounting to USD432,172 in new machinery, trucks, equipment such as moisture meters, servicing, and improving old machinery by adding magnets, renovation of premises (putting up wire mesh, painting, plastering, partitioning, floor repair), and construction that included building changing rooms, washrooms, water tanks, sorting area, soaking area, and stores. Twenty-seven percent of processors hired additional personnel to support the production processes, while 9 percent made no additional investments. The tracer study revealed that medium (9 percent) and small (36 percent) enterprises made more investments, accounting for 32 percent and 53 percent of the total investments, respectively. See Figure 2.

Benefits observed by processors

The majority of agro-processors (82 percent) realized immediate benefits from the actions taken and/or investments made after the SWT. These include savings from improved efficiency, and reduced fines and penalties arising from non-compliance. For example, during the learning events, processors shared previous experiences of their products being impounded en route to markets or in the market due to nonconformity to set standards. Processors who upgraded their milling machines observed cost savings of an estimated average of USD46 monthly. In comparison to the old mills, the new machines are energy efficient and release less flour dust, improving the conversion ratio of grain to flour. Furthermore, improvements made in the working environment, construction of fences, and enhanced procedures for receiving goods resulted in improved safety and fewer occupational hazards in the factories. Processors that purchased better quality grains cleaned and stored their grains better, improved their storage practices, and experienced reduced rejection rates (from three to five out of every 10 bags of grain down to one in 10 bags). Thus, higher tradeable amounts and sales were realized.

Figure 2. Investments Made After SWT



Demand for certification support services by agro processors

The cereal processors identified areas of further support required ranging from: technical assistance for processing and quality management of

additional products such as millet, soya and cassava; understanding quality standards for the export market for millet, cassava and soya; access to qualified quality control and management personnel; marketing and branding; capacity building on storage systems as well as knowledge of energy efficient models to reduce power; and access to investment capital/finance. This offers ideas for topics that the next SWTs might cover, and areas consultants can diversify into to improve their value proposition to processors and commercial viability of their services.

LEARNINGS

- **Access to information about standards and recommended practices, combined with certification support services and laboratory testing drives processors' investment in upgrades.** Processors that were in operation and had accessed the above information and/or services made systems or infrastructural adjustments to their facilities, despite not knowing if they would get access to a higher price for certified milled products.
- **The enforcement of standards compliance by UNBS and industry associations incentivize investments in and adoption of standards**. Processors that applied for certification in some regions (Southwestern and Eastern) experienced heavy enforcement efforts by UNBS, including shut down of non-compliant mills.
- **Many processors are still unmotivated to produce certified products due to lack of market requirements or avoidance of premium quality payment.** The processors expressed the need to access better markets that pay more for certified products at the learning events. The prevailing price margin does not compensate processors for higher infrastructural investments required to attain the quality mark certification. However, the tracer study illustrates benefits in terms of cost reductions made from adoption of improved practices and from upgrading the premises—which is largely unknown to processors that have not made any upgrades or paid attention to cost differences emanating from compliance efforts. Early evidence suggests that large, institutional buyers like military and schools may be starting to buy certified products, which will shift market demand.
- **Processors may not be in position to pay for the SWTs yet.** Many are still ignorant or unappreciative of Q-Mark certification benefits or lack the cash to upgrade. To build demand for CSP services, local service providers may need to diversify SWTs and TA to cover other technical gaps important to processors and collaborate closely with processors' associations, other industry associations, and development partners to organize and pay for trainings and services that they need.
- **Events that bring together processors are attractive for a range of service providers** (e.g. laboratory, consultants, business advisory, insurance, and banks) as witnessed in the learning events. The sustainability of SWT may also hinge on engaging service



One of the miller's premises that were recently upgraded in preparation for certification. Photo: Dorothy Nabatanzi

providers to co-sponsor the events in exchange for time to pitch and network with the processors. FtF IAM continues to engage with industry associations, the World Food Programme (WFP), UNBS and service providers to consider a phased approach to building the willingness of processors to pay for training and services.

- **Entrepreneurial success of the CSPs rests on their ability to offer a wider range of services** beyond the Q-Mark certification support services. CSPs are beginning to redefine their service package to enhance their value proposition to agro processors but may need additional training from experienced professionals like FSA and PFS. For instance, Grace Were, a CSP in Mbale, began offering record keeping services as an add-on to GMP/GHP training to processors. Agro processor umbrella bodies are also possible conduits for providing fee-based technical assistance to processors. The Grain Council of Uganda (TGCU), Kasese millers, Mbale Industrial Area Millers Association (MIAMA) and Lango millers shared their experiences in the learning events and should be supported to develop commercial service packages for members.

CONCLUSION

The combination of SWTs, local certification support services, UNBS enforcement and industry collaboration played a collective role in increasing the rate of agro-processors upgrading and obtaining certification. **None of the approaches are likely to have been successful independently.**

To increase wider adoption of standards by processors, a transition to more sustainable and scalable models is necessary to build on the above approaches. Industry associations play a critical role supplementing UNBS efforts enforcing compliance among processors, and in being a provider of, or a link to, local consultant services and other services like finance, insurance, laboratory, and business advisory. These associations, through



Workers off-loading maize grain (raw material) at Medi and Sons Special Millers in Mbale Industrial Area. Photo: Dorothy Nabatanzi

partnerships with development programs and private sector actors, can trigger processors to start the certification journey and support the attainment of certification. Beyond the standards enforcement, associations can catalyze agro processors efforts by sharing learnings on the immediate certification benefits from investment in upgrades. They can also work with UNBS and other actors to carry out regular consumer awareness campaigns that increase appreciation for, and competitiveness of, certified foods. In the longer term, they may lead industry self-regulation efforts.

FtF IAM continues to collaborate with government agencies, consultancy firms, and peer institutions (UNBS, PFS, FSA, WFP, FtF Strategic Investment Activity, FtF Institutional Systems Strengthening, FtF Advancing Nutrition) to strengthen institutional capacity of the processors and industry associations. The Activity is sequencing its approach to support agro-processors and traders' investment in the supply chain that enables farmers to benefit from increased demand for quality raw materials through stronger supply chain relationships, higher prices and other services buyers can offer farmers.