

### **Replication Briefs**

Evidence-based management of off-taker - supplier business relationships



2SCALE Consortium



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## 1. Pioneer partnership

Feska Ltd is a Kenyan dairy processing company based in Meru County in the Mount Kenya region. Feska started the milk business on their own farm where the milk was produced and sold to processors. With 80 dairy cows, the milk was not enough to sustainably operate their 12000 litres milk cooling capacity and therefore engaged a network of Small Holder Farmers (SHFs) within 20km radius from the processing factory. 2SCALE supported the firm to develop efficient sourcing of fresh milk by creating linkages between Feska and 2000 SHFs during the partnership period 2016-2018. The ambitions of the partnership were to build the capacity of 2,000 SHFs to supply at least 40,000 litres of milk per day to the Feska factory, facilitating access to high quality fodder to the 2,000 SHFs and to support in development of Feska's business strategy including dairy processing, marketing, branding, and distribution. One of the perennial problems faced by SHFs in Kenya is lack of transparency and poor record keeping on the part of the off taker. To address this challenge, it was deemed important to invest in an automated out grower management system to boost SHFs confidence and trust.

## 2. Replicable practice

Smart weigh system (SWS) is a supplier's data management system that uses cutting-edge technology to capture data accurately, eliminate human errors and relay the same data in almost real time to both the supplier and buyer. The system uses a digital weighing scale and a smart phone that are interfaced and communicate with each other remotely. The data is collected offline and is transmitted automatically from the smart phone to the up-taker buyer and the upon connectivity to internet to server.

When a farmer delivers milk to FESKA, a clerk keys in the supply number on the smart phone downloaded SWS app. The milk is weighed using the digital scale that records the kilos delivered automatically on the phone. This data is relayed to the supplier phone and server automatically and either a receipt and or SMS sent to the supplier immediately. The system also has an inbuilt mobile money transfer that Feska uses to make payment to the farmers. This makes the payment faster, simple, and easy. Some of the specific challenges addressed by the system within Feska included:

- Missing farmer's records on the quantity of milk delivered.
- Errors by data clerks on weight of milk delivered.
- Entry of milk data to the wrong supply number.

The onboarding into SWS started with a pilot of 100 suppliers then after customization to Feska needs, all the 1,200 farmers were enrolled to the system on voluntarily.

To summarize, this practice is addressing constraints in terms of:

Inclusion	•Ownership: SHFs own the land and dairy animals while Feska provides the market and owns milk cooling system. Feska's long term plan was to venture processing of UHT/long life milk targeting BoP consumers. This is a strategy to improve and diversify income in order to pay farmers better prices/liter of milk delivered.
	•Voice: 2SCALE supported Feska to automate the milk collection process giving a voice to SHFs who lose millions of shillings of their hard-earned cash through improper recording of milk weigh and, loss of records. Transactions are fully transparent, and this ensures that every drop of milk supplied by the farmers is paid for. The farmer is also fully aware of the actual volumes supplied and the amount due. The system was open to all the farmers on willing seller basis, therefore, all farmers supplying milk to Feska benefited irrespective of their location and volumes supplied. This build farmer's/suppliers' confidence and trust as a result the volume of milk tripled (from 4000lts/day and 12,000lts on average in 2017).
	•Risks: 2SCALE capacity building and support enabled both the SHFs and Feska to identify gaps and streamline operations for the smooth running of value chain business. Supply chain management can be a nightmare for a buyer or processor dealing with thousands of small individual suppliers. Farmers are paid promptly through mobile money transfer linked to Smart-Weigh. The system also ensures traceability and quality because every batch of milk can now be traced back to the individual supplier/ farmer group and this improved quality makes Feska competitive in the market.
	• <b>Rewards:</b> Farmers confidence was improved motivating them to increase production consequently improving their earnings. Farmers credit rating improved through the IT system that provided farmer delivery and income history thereby not only making it easier for farmers to access finance but also getting higher credit amounts. With reduced spoilage and less staff employed to manually record milk data resulted to cost savings for Feska. The spill-over economic benefit by Feska was also enjoyed by farmers through better milk prices. The manual recording of milk was a time-consuming exercise that caused delays in milk collection causing milk quality to deteriorate resulting to rejection by Feska.
Access to Nutritious Food	• Affordability: The cost of the supplier management system was reasonable with the benefits outweighing the initial cost of investment by Feska. Farmers did not pay for the system however, Feska recouped the cost of the IT system from improved business performance. Only farmers that wanted SMS alerts were charged a very small cost that is below normal SMS charge since these was considered a bulk SMS service.
	• <b>Appropriateness:</b> The supply management system was appropriate based on 100% onboarding of the farmers and continued use of the system by Feska. The purchase of the system by the neighboring Kanyakine dairy also demonstrates its relevance.
	• Acceptability: The system promoted best ethical business practices, thus, was readily accepted by the farmers. The ethical practises include transparency, honesty and accuracy while capturing farmer's data on milk delivered. The weights were captured electronically and relayed to the server through internet, leading to higher level of accuracy and winning suppliers' confidence

# 3. Preconditions for replication

#### An inclusive lead partner

-The lead firm has to be willing to invest in a relationship with the farmers that is inclusive and mutually beneficial. This requires an inclusive firm (buyer) willing to invest in the business model that seeks to create value for low-income communities (SHFs) by integrating them into a company's value chain in sustainable way. In this case, Feska invested resources in capacity building of farmers, farming contracts and supply data management software. This boosts farmer's confidence to invest in the value chain.

#### **Organized farmers**

This model works best when there is a form of organization on the farmers, for example farmer groups, community-based organization, or farmer cooperatives. In this case, farmers were organized in the group, with the group leaders signing supply contracts on behalf of members. Besides other benefits working with the groups made milk quality control easier.

#### Integrated interventions

The SWS cannot produce the desired results independently, it is to supplement other interventions that address key challenges in the partnership. For this partnership, capacity building on fodder and feed was a perquisite to the SWS adoption to increasing production and improve the quality of milk.

#### Supply Data Management service provider

A reliable supplier is key, it's not 'a one fits all' approach but needs to be customized to the needs of the partnership. Smart-weigh system developed and customized it to the requirement of Feska dairy through their IT experts.

## 4. Results Achieved

In the pilot year 2018:

•The supplier number grew from 500 to 1200 farmers in one year. While on the other hand the milk volume grew from 4000 lts/day to 12,000lts/day collection. Proving that this a viable practice worthy of replication.

- Over 10 dairy groups and one dairy cooperative trained on the Smart-weigh system (suppliers data management system).
- The pilot started with 100 SHFs and later rolled out to over 1,200 farmers/suppliers on a willing buyer basis.

• The IT solution was transparent, accurate and transmitted data almost in real time. This impacted positively on the business where the volume of milk delivered tripled from 4,000lts to 12,000lts/day on average in 2018, this was in combination of other interventions within the partnership.

• Feska reduced staff doing manual recording of milk volume by 50%.

• Feska reduced the time taken to collect milk from famers by 40% due to automation of records. This led to better milk quality as the quicker raw milk is delivered for cooling, the lesser the chances of spoilage/rejection.

 $\bullet \mathsf{A}$  neighboring dairy' Kanyakine 'adopted the system within the same year.

## Want to know more?

If you want to know more about this practice, please reach out to Patrick Boro, Country Team Leader, Kenya on pboro@2scale.org

Furthermore, you can also read more on the case through the following resources:

2SCALE Annual reports, 2017 and 2018.

2SCALE Insight paper. A dairy processor expansion ambitions set in motion dairy development in Kenya by David Njenga.



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