

Asset Fact Sheet

The Impact of Digitisation on the Efficiency of Small Medium Enterprises (SMEs) in the Agricultural Sector

Title of the Project: The Dynamic Markets for Farmers project

Implemented by: Swisscontact Uganda

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CONTEXT

The Ugandan agricultural sector, a cornerstone of the country's economy, faces significant challenges that impede its growth and development. Small and medium-sized enterprises (SMEs) within the Agricultural sector, despite their crucial role, often grapple with inefficiencies that limit their productivity and profitability.

The digitization gap among the SMEs in Uganda stands at 72% and this has resulted to increasing inefficiencies and slow growth of the SMEs and yet it accounts for over 90% of the private sector in the country. Small and Medium Enterprises (SMEs) play a crucial role in Uganda's economy, contributing significantly to job creation, GDP growth, and innovation. However, their adoption of digital technologies has been relatively slow, leading to a digitalization gap that hinders their competitiveness and efficiency. Delta Bees (U) Limited, one of the private sector partners for the dynamic markets for farmers project, was no exception to these findings.

DEVELOPMENT CHALLENGES

Private sector companies operating in the agriculture space of Uganda faces major challenges with records keeping. The manual records keeping results in high operational costs and spillage.

This manual process also hinders their ability to create reliable transaction profiles for financial institutions, limiting their access to finance. Limited access to premium markets, inefficient supply chains, limited access to financial services and products, digital knowledge gaps, and widening climate change impact resulting from paper-based business operations management. Additionally, the asset contributes to the Sustainable Development Goals (SDGs) 1, 2, 8, 9, 10, 12, 13, and 17 which includes; no poverty, zero hunger, decent work and economic growth, industry, innovation, and infrastructure, reduced inequalities, responsible consumption and production, climate action, and partnerships for the goals.



SUMMARY

Small and medium-sized enterprises (SMEs) within the agricultural sector, despite their crucial role, often grapple with inefficiencies that limit their productivity and profitability. These inefficiencies are exacerbated by factors such as limited access to technology, inadequate infrastructure, and a lack of digital literacy.

The existing paper-based data collection, and storage increases costs and risks and untrustworthy employees exploit weak data systems to defraud the SMEs. Lack of clear financial data has hindered SMEs from access to finance.

Swisscontact Uganda partnered with Delta Bees (U) Limited to develop a traceability system to improve the operational efficiency of the enterprise. The traceability system captures beekeepers' information (bio-data, inventory, site polygons, production volume) and relevant company-level business metrics such as sales, purchases, quality of products, and serves as a data repository.



2,566 Beekeeping Farmers (43% Female)
607 Metric Tonnes of Honey Production Facilitated



14,079 Cocoa Farmers (30% Female)
10,375 Metric Tonnes of Conventional and Certified Cocoa.

UNIQUENESS OF DIGITALISATION

Sub-Saharan African agricultural enterprises struggle with bookkeeping due to outdated data systems. Paper records hinder data storage, analysis, and decision-making. This limits their ability to forecast volumes and secure offtake agreements

In Uganda, 72% of the SMEs are digitally lagging (digital skill gap) thus realizing continuous inefficiencies in their daily business operations. This has stagnated the growth of several agricultural SMEs over the years. This therefore means that unlocking the potential of digital systems in the agricultural SMEs will spur speedy economic growth that will have a trickledown effect to the farmers in terms of fair prices.

The uniqueness of this asset therefore, lies in the transformative power of the traceability system to make a Small and Medium Enterprise (SME) more efficient in its business operations that has stimulated access to finance from different investors and development partners thus increasing generally investments in the honey sector in the country. Secondly, the digital payment of smallholder farmers creates farmer financial records (cash flow history) that enables them to fulfil one of the major requirements for access to finance for the smallholder farmers.

POTENTIAL FOR REPLICATION

The solution is highly replicable to any Small and Medium Sized Enterprise (SMEs) involved in the aggregation and sale of agricultural commodities.

PARTNERS

Several partners are benefiting from this asset. These include; private sector actors sourcing honey, commercial agents, local honey traders, primary processors, smallholder beekeepers, impact investors, transport services providers, digital service providers, beverage companies and public sector.

Delta Bees (U) Ltd is a registered company limited by shares formed in 2013, dealing in beekeeping-related businesses in East Africa. The company operates 7 branches and 78 collection centers in Southwestern, Western, Central, and Northern Uganda.

Hamwe East Africa, an Information Technology (IT) systems provider in Uganda was contracted to develop the traceability system. The beekeepers in Delta Bees' supplier network.

TARGET GROUPS

Beekeepers, most especially the supply chain and those receiving inputs on loan from the businesses are the primary target group. These receive extension services directly from the SMEs to optimize production of honey. Supporting market actors such as financial providers (impact investors), end market providers (traceable honey), and climate smart promotion initiatives are the secondary target groups. 3,315 small-scale and commercial beekeepers in Uganda form the current target group.

APPROACH

Partnerships

Swisscontact Uganda established a business case with Delta Bees aimed at promoting the sustainable honey production in Uganda. The partnership was aimed at improving its performance as a Small and Medium Enterprise since it plays a pivotal role in input supply and honey aggregation in Southwestern Uganda.

Ideation

Swisscontact interested Delta Bees (U) Limited in the idea of traceability by emphasizing the objectives, and benefits of traceability. The main benefit emphasized herein was the improvement of the operational efficiency of the company.

Assessment

Swisscontact and Delta Bees (U) Limited jointly conducted an information management system assessment to determine the current information collected and how improvements can be made during digitization.

Development

The teams jointly determined the scope of the solution and contracted Hamwe East Africa, an IT solutions service provider to develop the solution.

Execution

Hamwe developed the trial traceability system which was piloted to assess its efficacy and identify any errors. The initial glitches were corrected, and the system was finally rolled out for operation.

ACHIEVEMENTS

Reduced Costs of Production

The cost of operations for Delta Bees (U) Ltd has been reduced by 40%. This is a result of reduced transport and accommodation costs that were previously incurred in the monitoring of farmers and collection centers. It has further reduced the quantity of stationery used in company operations.

Driving Efficiency for Better Results

Delta Bees incurs fewer leakages since the system better captures the quantity of beekeeping products traded. Smallholder farmers in the Delta Bees market system are more assured of a market for their products since the company is more efficient, an aspect that strongly contributes to its profitability and sustainability.

Enhancing Honey Quality

There is improved product quality due to compliance with standards. Honey purchased from beekeepers is assigned a bar code and hence, traceability becomes very easy. This has in turn improved the quality of honey.

Unlocking the Global Market Potential

The online shop component of the traceability system has attracted international buyers of honey from Denmark and Turkey with these signing 2-year offtake contracts with the company. The traceability system has made reporting easier consequently facilitating quick decision-making.

Bridging the Financial Gap

The enterprise's access to finance has improved since the company's financial records can now be tracked. The visualization and improved bookkeeping that the traceability system offers have enabled the enterprise to access funding of UGX 200 million and UGX 300 million from the African Agri-Business Academy and Uganda Development Bank respectively. The company is also in the advanced stages of accessing impact investment worth USD 350,000.

Business Intelligence

The company has improved its business intelligence with the enterprise now being able to estimate the quantity of beekeeping products such as honey, beeswax, and propolis that it can source from its farmer network. As such, it is now in a better position to determine the offtake agreements that it can enter based on the quantity of the products sourced from farmers.

CHALLENGES

1. The company initially faced a challenge of system intermittence where a downtime on the server service provider hosting the system would automatically imply a shutdown of the Delta Bees traceability system. This was solved through Delta Bees hosting the system itself. Although this was expensive, it increased the system's reliability.
2. The system requires reliable internet connectivity which is not present in some districts where the company has collection centers. As such, the upload of data into the system is delayed.

LESSONS LEARNT

1. Donor intervention can catalyse change and increase the adoption of traceability systems among agri-business companies.
2. Traceability systems implementation requires continuous capacity development of company staff to enable them ably to run the system.
3. External system hosting service providers are sometimes unreliable, necessitating companies to host these systems by themselves. As such the cost of system hosting should not be overlooked.

POSITIVE OUTCOMES

1. The cordial relationship with Delta Bees encouraged the business to buy into traceability.
2. The adequate financial capacity of Delta Bees to cost-share the system, hire staff, and buy computers contributed to the seamless development and operationalization of the system.
3. Hamwe East Africa adequately trained Delta Bees (U) Limited staff, improving their proficiency in operating the system.