



Cropin™

Image credits: Mercy Corps

CASE STUDY

2020

Safaricom

Telecom For Change

Empowering Smallholder Farmers & Enhancing Sustained Food Security By Leveraging The Power Of AgriTech With A Global Network Of Partners

The Company

Safaricom PLC is the largest telecommunications provider in Kenya headquartered at Safaricom House in Nairobi. Being one of the most profitable companies in the East and Central Africa region, Safaricom's market size is approximately 63.5% in Kenya, as of June 2019, with a subscriber base estimated at approximately 33.1 Million. Incorporated in November 2019, DigiFarm Kenya Ltd (DKL) is a social enterprise entity owned by Safaricom PLC that aims at leveraging

technology to empower smallholder farmers in a commercially sustainable way. DigiFarm is an integrated mobile platform that offers farmers convenient, one-stop access to a suite of information and financial services, including quality products, customised information on farming best practices, access to credit and other financial facilities and market.



Largest Telecommunications provider in Kenya

Market Share **63.5%** as of 2019

Subscriber base **33.1 Mn**

The Project

Safaricom partnered with Mercy Corps, a global non-governmental, humanitarian aid organization and KLPA (Kenya Livestock Producers Association), for digitizing 250,000 smallholder farmers and 3,600+ Digital Village Advisors (DVAs) in Kenya. The project is

funded by Mercy Corps in the first year and plans to scale-up to 1.4 million farmers by 2020. With DigiFarm, Safaricom provided an integrated mobile platform in the project that offers farmers a single space to share information and transact.



Image credits: Mercy Corps

The Challenge

Digitising the agri operations across the board was the priority as most of the field processes were performed manually, which led to discrepancies in data storage and analysis. Farm reports were inconsistent and the extensive paperwork resulted in the loss of valuable data. There was a need for a one-stop solution that improves efficiency for users at all levels and provides real-time insights to key stakeholders. The solution also had to be user-friendly and customisable to the requirements of users to help make operations more productive. Some of the specific challenges that the organisation faced include:



Cumbersome and cost-ineffective process of the DVAs to capture data



Loss of data due to manual data collection through forms



Lack of accurate means to geo-map plots



Lack of visibility on the activities of DVAs - the field staff



Inconsistent yield insights



Requirement for real-time crop health monitoring



Difficulty in monitoring the quantity of agrochemicals used by farmers



Need for centralized system for sending advisories to farmer on weather and PoPs (package of practices)



CropIn's Innovation

Owing to their unique requirements for this project in Kenya, Safaricom along with Mercy Corps trusted CropIn to leverage SmartFarm for:



SmartFarm is an end-to-end farm data management solution that monitors all processes leading up to harvest. The solution leverages ground-truth data, weather advisory, and accurate insights based on satellite monitoring to enable data-driven farm and

business operations. By tracking, managing and monitoring every step — from input to execution — all in one place, SmartFarm helps achieve efficiency and improves traceability and output predictability.

Impact

DIGITISATION



CropIn's successful implementation of its digital technology-enabled Mercy Corps - Safaricom project to remotely monitor and manage **9,7239 plots** across Kenya

AREA AUDIT



CropIn's SmartFarm has audited over **9,28,940 acres of farmland** for various crops such as **Beans, Peas, Broccoli, Soybean, Green gram, Sorghum, Sunflower and Maize**

QUALITY CONTROL



CropIn's digital platform facilitated the monitoring of field activities for intensive quality control. By configuring the best **package of practices for each crop variety, and by creating a detailed activity plan based on the crop's growth cycle**, the DVAs ensure that the right farm practices are being followed at the right point of time

EASE OF OPERATIONS



Adopting CropIn's platform brought about ease of operations, both on and off the field. By **configuring SmartFarm to each user level's specific requirements**, the DVAs were able to **accurately track and capture essential data points**, even from activities that were unplanned

CENTRALISED PLATFORM



CropIn serves as a **centralised platform** where users at multiple levels in various departments can access farm-level data and insightful reports on the activities, to further improve people, process and performance

DIGIFARM VILLAGE ADVISORS



Over **3,600+ DVAs** have leveraged SmartFarm's mobile application for farmer registration, plot registration, and geo-tagging the cultivated land. Over **100,000 farmers' data** has been digitally captured and added to the system by DVAs



Image credits: Mercy Corps

Some of the other **notable features** that aided the digitisation activities include:

- An **offline mode** that enables data collection even in the absence of internet connectivity in remote locations
- Multilingual support in **15+ regional languages**, which simplifies the company's communication with users in countries where English is not the primary language
- **High levels of data encryption** to provide security and preserve privacy



Image credits: Mercy Corps

Scale-Up Plans

In the first year of the project, Safaricom in association with Mercy Corps are onboarding **250,000 farmers and scaling-up to 1.4 million farmers** by March 2021. As it can be observed, the combination of convenience and ease of use, along with a smart package of numerous practical yet unique features has resulted in

the success of CropIn's partnership with the client. CropIn is set to scale up its operations by leveraging its cutting-edge AI- and ML-based solutions for all-round progress of its operations.

The project will also be scaled up to involve :



Sending Advisory On Weather & PoP

Customized recommendations and advisories through SMS in the local language. By configuring the **best package of practices** for each crop variety, and by creating a detailed activity plan based on the crop's growth cycle ensures higher quality produce.



Yield Detection & Health Monitoring

Monitoring the plot and predicting the yield through remote sensing and satellite imagery utilizing plot history, existing vegetation and sowing window data. This intelligence helps both the farmers and the field extension teams to plan their tasks before the season.



Tracking Application Of Agri Inputs

To ensure higher quality produce that is compliant with international market regulations and standards.

IMPACT NUMBERS

250,000

farmers in 2019-20.

9,28,940

acres audited.

Scale-up to

1.4 Mn farmers by March 2021.

Over

97,239 plots.

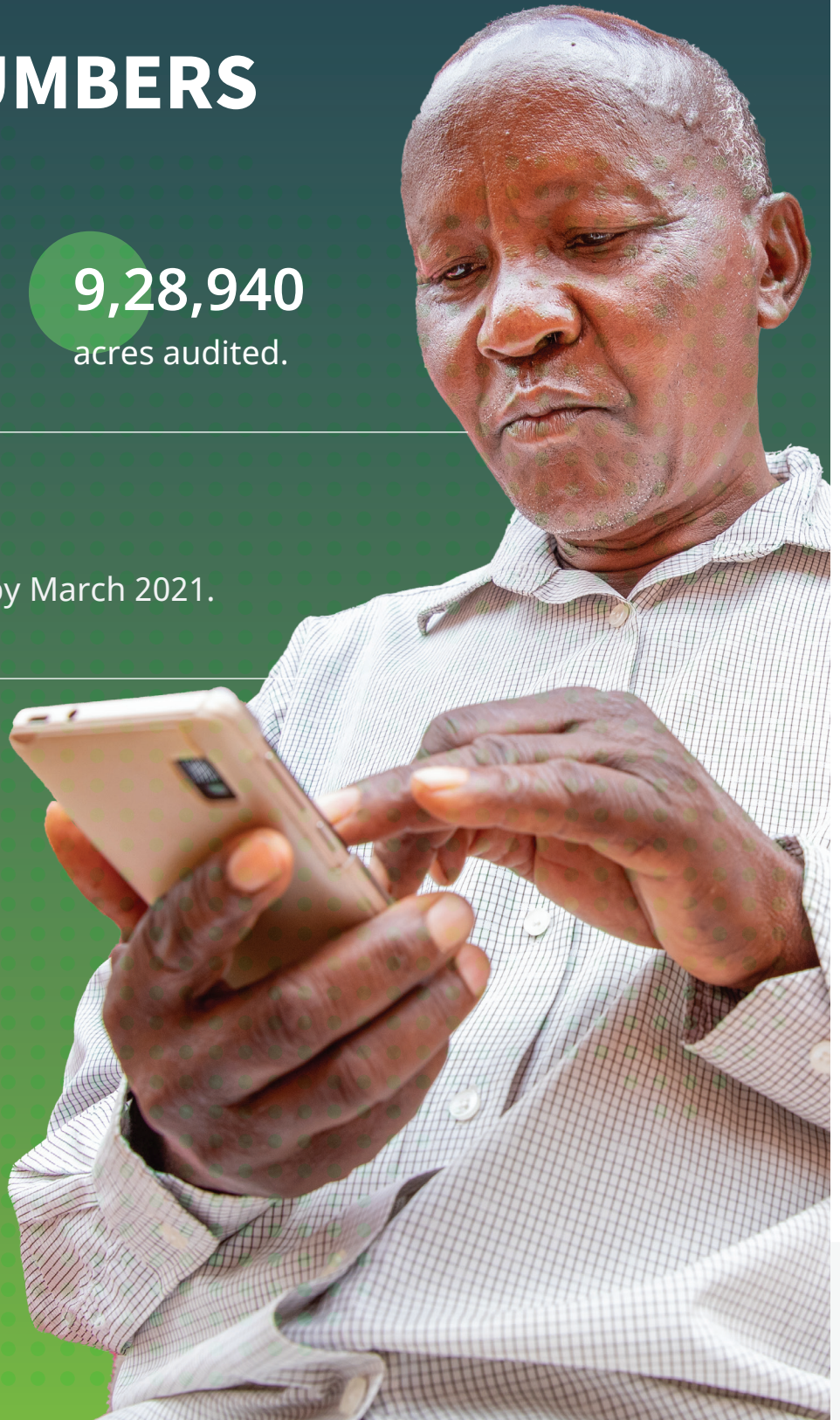


Image credits: Mercy Corps



SmartFarm™

FARM
MANAGEMENT
SOLUTION



SmartRisk™

AGRI BUSINESS
INTELLIGENCE
SOLUTION



SmartWare™

PACKHOUSE
SOLUTION &
TRACEABILITY



RootTrace®

SEED-TO-SHELF
SOLUTION &
TRACEABILITY



AcreSquare™

A B2B FARMER
ENGAGEMENT
APPLICATION