

CASE STUDY

2021

**2**SCALE

## Digitally Transforming And Creating A Traceable Rice Value Chain



## About 2Scale

---

2SCALE incubates and accelerates inclusive businesses through partnerships with companies (African/Dutch small- and medium-sized enterprises - SMEs) and producer organizations (POs) that want to build commercially viable strategies in African food industries through sustainable sourcing, based on mutually

beneficial relations with smallholder farmers and other local micro-, small- and medium-sized enterprises (MSMEs); and/ or by serving local and regional Base-of-the-Pyramid (BoP) markets with nutritious food products.



## The Challenge

---

2SCALE currently supports three business champions in Côte d'Ivoire (Also known as Ivory Coast), including a syndicate of 5 rice millers. These millers mainly work with networks of smallholder farmers who have limited access to quality farm inputs and services resulting in low farm productivity. There was a need for a digital solution to properly organize farmer data which makes planning, extension delivery, training, and other

advisory services easy to implement. The millers also had challenges managing quality (especially aflatoxin) which is exacerbated by the lack of a traceability solution. 2SCALE sought to address these hurdles in its rice production, procurement and reporting processes to strengthen management and facilitate digitization of their farmer databases.



## Project Objective

The general objective is to help the rice millers to digitize farmer profiles and field operations to improve farmer management, efficient procurement, and staff accountability.

Specific objectives include:



Improve the efficiency of partners' supply chains by the digitalization of the purchasing and post-harvest processes.



Collate relevant data including biodata, household information and farm information of 500 farmers including 20% women and 40% youth and create digital identities that can be used for planning, monitoring, and supporting the professionalization of the Producer Organizations (POs).



Enable utilization of analytical capabilities of digital tools in predicting supplies, supporting decision-making processes and track the impact of activities like training and input supply.



# CropIn's Innovation

To support field operations and manage the relationship with their producers, two millers in Cote d'Ivoire (Locagri & Katio Akpa) participated in a pilot project with CropIn for a period of 12 months. The project implemented CropIn's end-to-end digital platform -

SmartFarm mobile application for digitally profiling 500 farmers, facilitating field staff activities, supporting farmer advisory and managing the procurement of produce.

CropIn										
Dashboard Reports Setup Administrator (en-IN)										
Farm Data										
Farmers										
<a href="#">Add</a> <a href="#">Add New</a> <a href="#">Assign Farmer</a> <a href="#">Show All</a> <a href="#">Delete Farmer Log</a>										
Show 20 records Page 1 of 10 View 1 - 25 of 483										
<input type="checkbox"/>	Actions	Farmer Name(C code)	Assign To	Plot(s)	Guardian/Partner	Address	Mobile #	Area (acre)	Status	To
<input type="checkbox"/>		MEDIA FRANCOIS (A002898870)	Koné Kafedjo Justine-22509252408	1	KATIO-AKPA	Douakroegou, Hambol, Vallée du Bandama, Ivory Coast, Africa	9781629559	7.4132	Approved	
<input type="checkbox"/>		PAKAMA ISSA (A002898802)	Koné Kafedjo Justine-22509252408	1	KATIO-AKPA	Douakroegou, Hambol, Vallée du Bandama, Ivory Coast, Africa		4.9421	Approved	
<input type="checkbox"/>		KONE BAKARY (A002898847)	Koné Kafedjo Justine-22509252408	1	KATIO-AKPA	Douakroegou, Hambol, Vallée du Bandama, Ivory Coast, Africa	9584201460	4.9421	Approved	
<input type="checkbox"/>		Saïlou Traoré (A002815622)	Yaya Zia Coulibaly-22509966212	1	KATIO-AKPA	Kanankaha, Hambol, Vallée du Bandama, Ivory Coast, Africa	9140207179	4.9421	Approved	
<input type="checkbox"/>		KONE OLAFAMOU JOACHIM (A002898890)	Koné Kafedjo Justine-22509252408	1		N'dena, Hambol, Vallée du Bandama, Ivory Coast, Africa	9182647969	3	Approved	
<input type="checkbox"/>		PODA SAMMALE (A002867013)	Koné Kafedjo Justine-22509252408	1	KATIO-AKPA	Ouedékaha, Hambol, Vallée du Bandama, Ivory Coast, Africa	919140209408	2.4711	Approved	

Farmer & Plot Digitization



Geo-tagging & Area Audits of the farm



Crop & it's variety configuration /selection



Monitoring on Crop Stages



Current Practices adhered in the farm for the crop

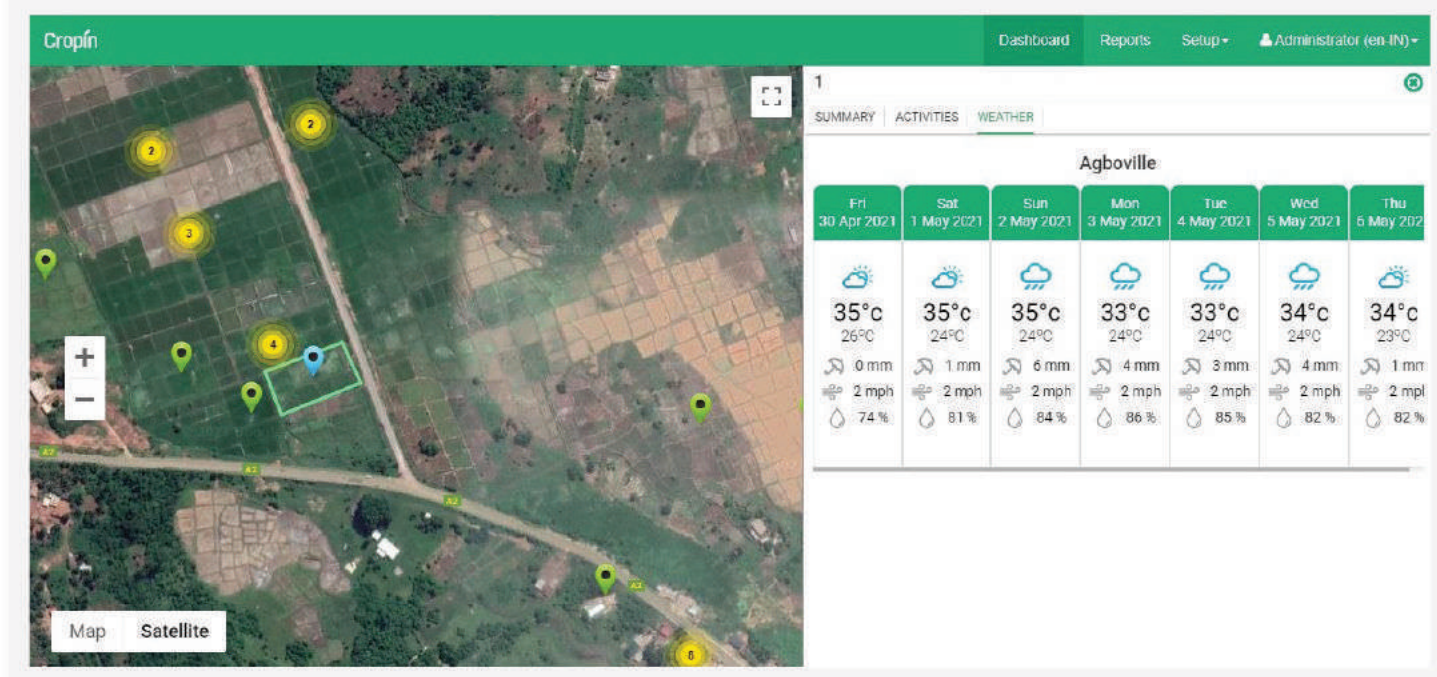


Pest and disease management practices



Advisories to be followed by the farmer while implementing the practices at different stages of the crop





**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.

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

## Results

In the first 6 months of the pilot, key information on 452 smallholder farmers was captured into the CropIn's platform and periodic farm audits are performed on the rice crop using the SmartFarm mobile application. Data

from the platform enabled Locagri and Katio Akpa to visualize where their farmer plots are based, to tag areas under crop and get predictions of the rice harvest.

'Your solution solves important challenges in agricultural value-chains and is flexible to adapt to different agribusiness operations' - Samwel Tobiko NAIMASIA, Digital Innovation Officer, 2Scale



# IMPACT

Crop

**Rice**

Geography

**Agboville location (Ivory Coast),  
Hambol location (Ivory Coast)**

**452**

Farmers registered

Over

**459** plots

Area

**596** Acres

Harvest (Received)

**73** Tonnes

Harvest (Target)

**1716.4** Tonnes



**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