



## Farmshine Overview

Farmshine was incorporated in 2017 to enable smallholder farmers to earn higher incomes by growing quality crops and selling directly to large buyers. To facilitate this trade, the company has developed a digital platform comprised of a mobile app and a management dashboard. The platform transparently connects farmers and buyers, ensuring a fair means of trade for farmers and a quality product that meets the buyers' specifications. Each activity takes place through the app – including purchase agreement, production management, crop aggregation, delivery and payment.

We also offer a comprehensive management dashboard, which can be used to manage, monitor and evaluate all field activities – including farmer trainings, type of conservation agriculture methods used by each farmer, crop yields by farmer, region or sub-region, and total sales to end buyers. The data collected by these dashboards can also be used to offer beneficial products and services to the farmers. For example, a successful record of production and sales can help farmers to obtain preferential rates on small loans. These loans can be used to buy improved seeds before the planting season, which we can offer at a discounted rate by aggregating the purchases of many farmers.

The platform has been used with over 10,000 farmers to perform the following functions:

- *Assess:* Review the farmers' capacity to grow crops that meet the buyers' quality specifications.
- *Manage:* Field operations are managed by our field officers: register each farmer, advise on crop selection before planting, engage in contracts with buyers, monitor crop growth and resolve problems, aggregate harvests and deliver to buyers.
- *Monitor:* The data collected on our platform is aggregated into a management dashboard, which can show the activities of each farmer, field officer and buyer: expected yield, type of agriculture practices used, number and type of trainings conducted, total buyers' demand for each crop, etc.
- *Trade:* Farmer groups engage in transparent trading contracts with reliable buyers.

## Field Operations

*Field officers:* One field officer should support about 200 farmers. The field officers provide training in conservation agriculture, good agriculture practices and agribusiness, and work with farmers throughout the growing season to optimize production in accordance with each buyer's quality specifications. The field officers also help farmers to select the best crops to plant each season (based on market prices and conditions), and to aggregate their purchases of seeds and other inputs.

*Registration and traceability:* The registration of farmers and all trading activities are facilitated by the field officers using the mobile app. Under each farmer's account, the field officers enter a photo of the farmer's identification card and the GPS coordinates, as well as total acreage of the farmer's land. Throughout the season, the farmers' crops are monitored and the following information is entered into the app: projected yield, plant pests and diseases encountered and treated, actual quantity harvested, quality of harvest, total revenue per farmer.



**Contracts:** The buyers use an online dashboard to enter their proposed contracts, which include the following information: the variety of crop they want to purchase; the quantity in tonnes; the price offered; and the quality specifications. A buyer can offer a *forward contract*, which commits to paying a certain price to the farmers at the time of harvest. This type of contract includes a price adjustment mechanism to account for variability between the market price and the forward price. Alternately, a buyer can purchase on the *spot market* at the current market price.

**Aggregation and payment:** In order to fulfill the large contracts offered by buyers, the farmers aggregate into associations. At harvest time, the crops are bagged by the farmers, inspected for quality by our field officers and delivered to a nearby aggregation point. The crops are sorted and graded in accordance with the quality specifications defined in the buyer's contract. Depending on the contract type, farmers receive a full or partial digital payment when the crops are inspected in the field and loaded onto the delivery truck. In the case of partial payments, once the buyers receive, sort and inspect the crops, the remaining payment is made to farmers.

## Impact

**Livelihood impact:** Smallholder farmers (most of whom are women) are generally excluded from the formal economy, and it is difficult for them to find better opportunities or higher paying work. In addition to helping farmers sell more crops at better prices, our platform provides farmers with an economic identity and trade history. Farmshine's app records the quantity and quality of each harvest sold, as well as loan repayments, trainings received, and other indications of a successful, reliable farmer. Based on this record, the farmers can apply for small loans, access more profitable market opportunities with our buyers, and purchase inputs on credit. This identity and trade history is a vital enabling factor for farmers to look beyond their farm and the local markets, and to connect with the entire agricultural ecosystem.

## Management Overview

**Luca Alinovi, CEO.** Luca was the Executive Director of the Global Resilience Partnership (a joint initiative of USAID, Rockefeller Foundation and SIDA), UN-FAO Representative in Kenya and Somalia, and a senior manager at several technology companies. He has a master's degree in Tropical Agriculture and a PhD in Agricultural Economics.

**Alessio Colussi, Technical Director.** Alessio has over 30 years of experience working with farmers in 30 countries. He was Head of Agribusiness at UN-FAO in Kenya, where he led a project that trained 80,000 farmers in conservation agriculture and connected them to buyers. Previously, he managed the green coffee supply chain for Illy café (a \$500 million company). Alessio has a master's degree in Agriculture Science.

**Chris Mimm, Director, Partnerships.** Chris worked with UN-FAO for eight years, most recently in the evaluation department. Previously he co-founded a consultancy business that facilitated business and research partnerships, and before that he was an analyst at Credit Suisse. Chris has a master's degree from Harvard University.

**Elijah Mwangi, CIO.** Elijah is a senior software engineer responsible for design and development of Farmshine's app and platform. Previously, Elijah was the Project Manager for Barcode Kenya and Farm Concern International. Elijah holds a Bachelors of Computer Science from Jomo Kenyatta University.