

THE POTENTIAL OF DIGITAL FINANCIAL INNOVATION TO TRANSFORM AGRI-FOOD SECTORS IN DEVELOPING CONTEXTS

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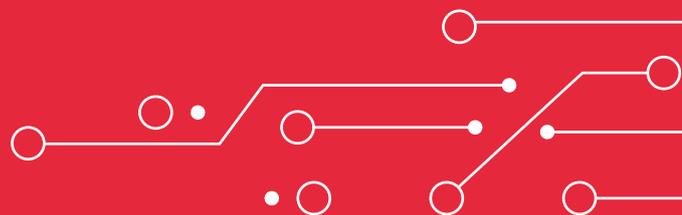
Digital financial innovation presents us with a compelling opportunity to build more inclusive, sustainable and efficient agri-food sectors. Digital finance, primarily in the form of mobile money, enables formal financial inclusion for millions¹⁴⁸ of previously underserved smallholder farmers. **Digitized agricultural payments** are often the first step towards financial inclusion, eventually leading to credit, savings, insurance, and a variety of complementary services.¹⁴⁹ Digital innovation is important for vulnerable groups engaged in agriculture, such as rural women and youth, who face complex and unique barriers (economic, legal, and sociocultural) to formal financial access. Most of these barriers can be mitigated, if not outright removed, through the design and commercialization of tailored digital financial services.

Digital financial innovation allows the many actors in agricultural value chains to interface and conduct business with more convenience, transparency and rapidity; it can overcome the lack of collateral or formal ID on the part of clients; it reduces the transaction costs and information asymmetries faced by financial institutions; it bolsters productivity and profitability for small-scale agricultural actors; and it provides small scale producers with access to markets and more stable and fair prices.

In the wake of the COVID-19 pandemic, digital finance has played an essential role in enabling agri-food value chains to remain **active and profitable** despite the widespread restrictions that have taken place, especially in developing contexts.¹⁵⁰ E-commerce platforms have allowed value chain actors (e.g. input suppliers, producers, processors, retailers) to continue doing business, while end clients have seen their demand for raw and processed food satisfied, which has kept production active. Digital credit has allowed small agri-food businesses to obtain essential loan capital to stay afloat, while digital payments have facilitated money transfers throughout agri-food value chains.

Simple and scalable digital financial innovations, designed and delivered with inclusion in mind, hold the most promising opportunities for small-scale agricultural actors.¹⁵¹ These innovations adopt a **one-stop-shop approach**, in which several services (of which financial access is but one component) are gradually added and bundled together on a digital platform that is designed to be easy to access and use for farmers.

One notable example of this approach is **DigiFarm**, launched in Kenya in 2017 by Safaricom, a mobile money operator, in collaboration with Mercy Corps.¹⁵² This mobile platform, accessible even through a basic mobile phone, allows farmers to access a wide range of services. These services are delivered by partner companies: direct input purchase; input credit; harvest cash loans; crop insurance; business training; access to soil testing; customized information on agricultural best practices; and linkages to market agents (e.g. processors, wholesalers). The data generated by each farmer's interaction with DigiFarm allows it to make lending decisions, with default rates lower than 5 percent. Despite these promising innovations, several barriers still limit inclusive agri-food sector digitization, especially among the most marginalized, rural and remote communities.



¹⁴⁸ A 2020 World Bank survey carried out among 29 domestic and international agribusinesses in 17 Sub-Saharan African countries, for example, estimated that digitizing payments among surveyed firms could act as a ramp for the financial inclusion of nearly 18 million farmers, opening up more than US\$6 billion in market potential for these enterprises.

¹⁴⁹ "Digitization of Agribusiness Payments in Africa: Building a Ramp for Farmers' Financial Inclusion and Participation in a Digital Economy", World Bank.

¹⁵⁰ "Digital finance and inclusion in the time of COVID-19: Lessons, experiences and proposals", FAO (2020).

¹⁵¹ "The Digitalization of African Agriculture Report 2018–2019", Technical Centre for Rural and Agricultural Cooperation (CTA).

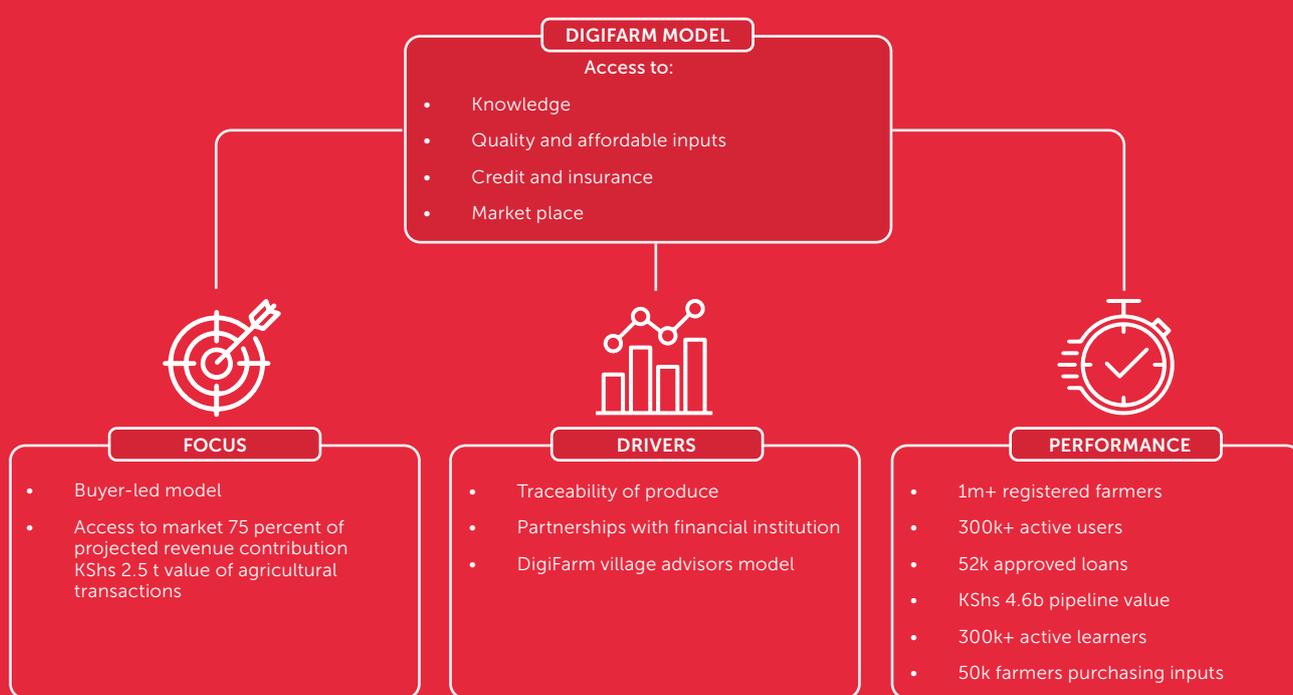
¹⁵² Case study on the DigiFarm platform by Mercy Corps

Barriers include weak ICT infrastructure in rural areas; a weak or absent framework to regulate the digital sector, including digital consumer protection regulation; issues related to data privacy and digital identity of farmers, who may use digital services for the first time; their need for digital and financial literacy to successfully use these new services; an overall lack of capacity among financial institutions to digitalize; and the stark gaps, in terms of digital access and usage, at the gender level (women vs. men) and among age groups (youth vs. adults). In fact, given their tendency to be early digital adopters, young entrepreneurs can play a **champion role** to drive agri-food sector digitization.

Promoting the inclusive digital transformation of rural financial services is part of FAO's broader support to

digitalize the agri-food sector. Such support is provided from a policy, programmatic, and capacity-building perspective. The establishment of an **International Platform for Digital Food and Agriculture** by FAO and partners represents an important step in creating a supportive context for agri-food digitalization globally.¹⁵³ The Platform will provide an inclusive, global and multi-stakeholder forum for identifying and sharing ways to harness digital tools and related best practices in agriculture and food and to maximize the potential of digital innovations for all. Such innovations can range from e-commerce, digital finance tools and blockchain technologies to digital advisory services, tools for early warning on threats to food security, improved management of natural resources, Artificial Intelligence for better pest control, and more.

FIGURE 16.
DigiFarm's strategic model and a sample interface of its mobile platform



¹⁵³ "Realizing the potential of digitalization to improve the agri-food system: Proposing a new international digital council for food and agriculture", FAO.