

Agricultural finance that reaches people facing poverty, gender, and age barriers

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Abstract: *A high-tech, high-touch, high-impact (H3) approach to agricultural finance enables expansion of financial service markets to people facing poverty, gender, and age barriers to economic empowerment. This article explains the H3 approach and presents the case of Opportunity International's Agricultural Finance Programme (AgFinance) in Africa. At the centre of the model are community-based farm advisors, providing high-touch/high-tech training in financial management, good agricultural practices, inclusion, and resilience. They also link farmers to financial service providers, input and equipment suppliers, and markets. In Malawi, where Opportunity has applied this model, outreach was high: 72 per cent of clients were living in extreme poverty, 57 per cent were women and 40 per cent youth. In 2021, the AgFinance programme facilitated loans to 68,262 borrowers with an outstanding balance of US\$24.82 m. This outreach and scale demonstrates a market systems model – the H3 approach – with deep outreach at scale.*

Keywords: agricultural finance, economic security, financial inclusion, poverty, high-tech high-touch, digital finance

Introduction and outline

Ending extreme poverty in Africa requires addressing small-scale agriculture, using a multi-dimensional intervention and addressing underlying inequalities (World Bank, 2020; United Nations, 2021). The vast majority, 89 per cent, of sub-Saharan Africans living in poverty are in rural areas. Most rural families depend on small-scale farming for the bulk of their livelihood. In turn, Africa's food systems are dependent on these farmers, the majority of whom face poverty themselves (World Bank, 2020; AMENET and MFW4A, 2021). The COVID-19 pandemic has severely exacerbated the urgency of helping millions of rural Africans to maintain or achieve economic stability and to feed the continent. Effective and timely

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agriculture support – including input access, technology, training, market access, and finance – is required to reduce poverty and expand food production (World Bank, 2020; Andrews et al., 2021; FAO et al., 2021). Approaches that incorporate inclusion of women and young people – or people facing other barriers – will not only reach more people facing poverty but also have a higher impact (FAO, 2011; Cassinath and Mercer, 2020; ISF Advisors, 2020; World Bank, 2020; Andrews et al., 2021; FAO et al., 2021). If women had access to the same agricultural support as men, they could increase productivity by 20–30 per cent (FAO, 2011). In addition, poor land stewardship and dramatic escalation of the impact of climate change call for a resilience perspective to strengthen the sustainability of household and farm improvements (ISF Advisors, 2020; World Bank, 2020; Andrews et al., 2021; FAO et al., 2021).

Most initiatives to reach small-scale farmers – even multi-dimensional ones that address the challenges mentioned above – exclude people living in poverty, women, and youth. Farmer field schools (FFS), the most common instrument for engaging farmers, reach between 0.4 million and 1 million farmers per year, globally, which is insufficient to reach the number of small-scale farmers living in poverty, even if FFSs were specifically targeting poor farmers. Although they are free, transaction costs for FFS participation can be high as many require regular participation throughout the agricultural season (van den Berg et al., 2021). Cooperatives do not typically engage poorer farmers because they require minimum production levels and dues. Finally, private-sector out-grower schemes, which offer inputs on credit and farmer contracts for marketing crops, require that farmers have title to their land and invest some up-front funds as security (IDH, 2021). Private investors are not attracted to many markets where less affluent small-scale farmers are active because these tend to be more informal markets that offer too many side-selling opportunities. Poorer farmers are also often located further from the main roads, have smaller farms, are unbanked, less likely to use digital finance, and are less literate (ISF Advisors, 2020; World Bank, 2020; FAO et al., 2021), all of which raises the cost of engagement. Women and youth face additional social barriers to participation in FFSs, cooperatives, and private sector out-grower schemes. Because of the social practice of the older male ‘head’ of the household being the representative of the family for public engagement, most agricultural outreach was or still is conducted toward the head of household. Hence, successful outreach to women and youth requires programmes to make intentional inclusion efforts or go further to strive to transform gender and intergenerational relationships among clients and their families and communities or even in the market (Cruz Zuniga et al., 2019; Cassinath and Mercer, 2020; IDH, 2021; Phiri, 2021).

Access to agricultural finance is even more difficult for small-scale farmers due to multiple underlying reasons that leave them out of financial and agricultural market systems. Formal banks focus their agricultural finance on larger farmers with a substantial track record, collateral, and management capacity. Microfinance is not typically suited to agriculture because repayment is structured in weekly instalments. In addition, most microfinance loans require that a person has been in business and/or in commercial farming for at least a year, which can be a challenge

for younger farmers. Savings and loans groups, which are more accessible to women and people living in poverty, are often discouraged from lending for agriculture because of the need for regular repayments and the fear that too many members would want loans at the same time (ACDI/VOCA, 2020; ISF Advisors, 2020). To overcome these barriers to agricultural and financial support, intensive and intentional programming is required, but this can be very expensive to deliver.

A community-based ‘agent’ approach – which can be lower cost compared to using staff – has been used by several pioneering organizations to deliver intensive services to farmers facing multiple barriers (FAO, 2011; ACDI/VOCA, 2019; Cassinath and Mercer, 2020; Andrews et al., 2021). The FFS model is generally implemented using a high ratio of volunteer lead farmers to staff (van den Berg et al., 2021). World Vision uses village agents as brokers to facilitate business linkages among producers and service providers – typically buyers or sellers of agricultural products. They use this approach in part because ‘extending the reach of village agents empowers women engaged in agriculture and lessens the distance between women farmers and crop protection services, high-quality seed, and other inputs’ (Cruz Zuniga et al., 2019). iDE uses a system of community-based agents that are last-mile entrepreneurs selling inputs and equipment, training farmers and linking to markets (iDEGlobal, 2021). Opportunity uses a technology-enhanced, agent-based approach to cost-effectively deliver its high-tech, high-touch, high-impact (H3) multi-dimensional bundle of agricultural and financial services to farmers facing poverty, gender, and age constraints to economic security.

Box 1 High-tech, high touch, high impact (H3) – defined

The term ‘high-tech and high-touch’ has come to refer to a method for implementing technology change that puts equal weight on the human interactions surrounding technical innovation as the innovation itself. By paying attention to people and technology, innovations can be more effectively implemented and useful to those they are meant to serve (Wunderlich et al., 2013). In the context of development work, ‘high impact’ is added to place weight also on achieving development impact in addition to positive client or partner user experience. Opportunity’s AgFinance programme contributes to Sustainable Development Goals 1 (End Poverty), 2 (Zero Hunger), 5 (Gender Equality), and 8 (Decent Work and Economic Growth).

This article presents a unique case study for an agent-based, H3 approach to the development of market systems that reach people living in poverty, women, and youth with a multi-dimensional bundle of support. The case shares Opportunity’s AgFinance model, which is showing signs of sustainability and positive outcomes. In the AgFinance model, the agents – dubbed Farmer Support Agents (FSAs) – use digital data systems to deliver farmer training and advice, and to assess farmers and link them to appropriate financial service providers, input and equipment suppliers, and markets. First, the article describes a client-centred, comprehensive bundle of services – delivered using the H3 approach – that addresses multiple dimensions of agricultural challenges – including finance. Then, the article describes the business model that delivers this bundle – a combination of digitally-enabled, community-based agents and larger financial service providers and value chain

businesses. Next, the article describes H3-informed interventions in the financial services and agricultural support markets that are at work in setting this poverty-focused market system sustainably in place. Finally, lessons in applying this model to date and ongoing areas of innovation are shared along with resources that can be used to help adapt the model to other situations. The model is illustrated throughout with the case study of Opportunity's International's (Opportunity) AgFinance Programme (AgFinance) in Malawi.

Box 2 About Opportunity International

Opportunity's mission is to provide financial solutions and training that empower people living in poverty to transform their lives, their children's futures, and their communities. Its vision is a world in which all people have the opportunity to achieve a life free from poverty, with dignity and purpose. Opportunity has 50 years of experience in financial inclusion. In 2020, Opportunity reached 19.4 million clients, 95 per cent of whom are women, through 104 partners in 30 countries, facilitating loans worth \$2.3 billion (Opportunity International, 2020).

Farmer support: client-centred comprehensive H3 service bundle

In the AgFinance model described here, clients receive a comprehensive bundle of high-tech, high-touch services, customized to meet the needs of less literate, lower-asset farmers of diverse demographic backgrounds. Costs of delivering this bundle are controlled by using technology and an agent approach. The bundle includes the following solutions.

1. *Loans and other financial services.* Loans finance a particular crop and are structured to reflect specific crop cycles with a lump sum payment at harvest season. Loans are guaranteed by fellow group members and a savings security deposit. Loan sizes generally start at financing for one acre (0.4 hectares) and are increased gradually as clients develop a track record. But there is also demand for more holistic financing – for example for multiple crops, off-farm businesses, or school fees – and the programme is exploring ways to meet this demand. Meanwhile, other financial services are promoted. Savings start as security against a loan, but clients are encouraged to save more for emergencies or investments. Clients are trained in digital finance to reduce transaction costs and financial institutions' operating costs.
2. *Agricultural training and coaching.* Agricultural training and linkages are delivered by community-based agents trained in gender and age issues. The materials reflect a diversity of clients and some specifically raise the issues of gender and age in household and farm decision-making, to stimulate clients to recognize and address inter-household inequalities. Those materials – primarily videos – were developed in a participatory, improvisational manner with the agents playing the roles (van den Berg et al., 2021). Throughout and after the training, agents refer appropriate clients to financial service providers and continue to follow up with active, engaged clients and farmer leaders.

Technology-enhanced support services also include video-based training in local languages, information delivered via SMS and voice-recorded messaging, and more.

3. *Linkages to agricultural support providers.* Agricultural support providers are a broad category encompassing input and equipment suppliers; government, NGOs, cooperatives/associations, or private sector companies that provide information, training, and services to the agents, to pass on to farmers. These same entities offer crop market opportunities, as do less formal micro, small, and medium enterprises. These potential partners are vetted for quality, and/or their prices negotiated by Opportunity or, at the local level, by the agents.

This bundle is delivered via community-based farmer support agents (FSAs). FSAs recruit farmers, capture data, deliver agricultural and financial training, and link farmers to financial service providers (FSPs), input and equipment suppliers, and markets. FSAs are technology-enabled, using technology to perform their duties. When possible, they also link target farmers to digital finance, but the H3 approach does not depend on client digital inclusion.

In Malawi (2019–2021), the H3 approach using FSAs succeeded in enhancing outreach, compared to a traditional out-grower scheme. The programme promoted soy production as an alternative to tobacco for small-scale farming (defined by area of land cultivated, according to context). The out-grower (a new, medium-sized social enterprise) offers farmers access to inputs, technical advice, and a ready market, although they do not oblige farmers to sell through them. They partnered with Opportunity's FSA network to access farmer financing for the inputs, trained and community-friendly extension agents, additional training materials, access to markets for farmers choosing not to sell through the out-grower, and monitoring services. The programme reached marginalized farmers. Among clients served, 72 per cent were living in extreme poverty (defined as \$1.90 per day), 57 per cent were women, and 40 per cent were under 36 years old. In addition, 31 per cent were first-time borrowers (in recent years). In the same programme, Opportunity also supported a more traditional out-grower that targeted contracted tobacco farmers to help them grow groundnuts as a diversification strategy. That scheme did not reach marginalized farmers as well: only 44 per cent of farmers were living in extreme poverty, only 6 per cent were women, only 16 per cent young, and only 5 per cent received a first-time loan.

The pilot H3 programme also showed promising results, compared to the traditional out-grower programme. After one season, 52 per cent of farmers trained by FSAs increased their yields and 46 per cent increased their income, while only 42 per cent of farmers serviced by traditional farmer-contractors increased yields and only 36 per cent increased income (see Table 1). Overall, 82 per cent were satisfied with FSA training, and 96 per cent repaid their loans in full. Planning is under way for a more rigorous impact assessment as the programme scales the model in Malawi and other countries.

In terms of overall household well-being, which includes food security, farmers accessing the FSA network were more stable than those operating under the traditional out-grower model. Household well-being declined for a large portion

Table 1 FSA and traditional out-grower scheme compared (portion of clients over 1-year pilot)

	FSA (%)	Traditional (%)
Percentage living in extreme poverty	72	44
Percentage female	57	6
Percentage youth (below age 36)	40	16
First-time borrower in recent years	31	5
Increased yields	52	42
Increased income (from non-tobacco crops)	46	36

Table 2 Change in household well-being, 2018–2019

	FSA (%)	Traditional (%)
Better or much better	32	35
The same	48	22
Worse or much worse	19	43

of farmers under the traditional model (43 per cent compared to 19 per cent for the farmers under the FSA model). Almost half of the farmers served by FSAs report stable well-being (48 per cent compared to 22 per cent) (see Table 2).

Business model part 1: community-based agent network

The delivery mechanism for the demand-driven service bundle described above is designed to reach and serve marginalized farmers through digitally enabled, low-cost community-based agents. These agents – dubbed Farmer Support Agents (FSAs) – deliver the comprehensive package of support described above. They use smartphones to monitor and capture data on farmer clients and deliver training and information. They comprise one of two core components of the sustainable business model in this market systems approach, as depicted in Figure 1.

The FSA system effectively deepens outreach beyond the mainstream farmer associations that are so often the target of private sector out-grower schemes and development programmes to small-scale farmers. As community members, FSAs are well-positioned to engage deeply with farmers, because they do not have the same class, language, or cultural barriers as more formal agents or bank representatives external to communities. The FSAs are screened for and well-trained in gender and age dynamics, which facilitate their capacity to reach across gender and age barriers in local communities. In the Malawi programme, Opportunity partnered with two farmer out-grower companies, one well established and using a traditional approach, and one new company using the FSA approach. In the well-established partner, educated, experienced staff engaged farmers at a higher cost. In the newer partner, lower-cost FSAs were recruited from among community members and were more effective in reaching people with multiple barriers. The FSAs were both trained and well-positioned to recruit this population.

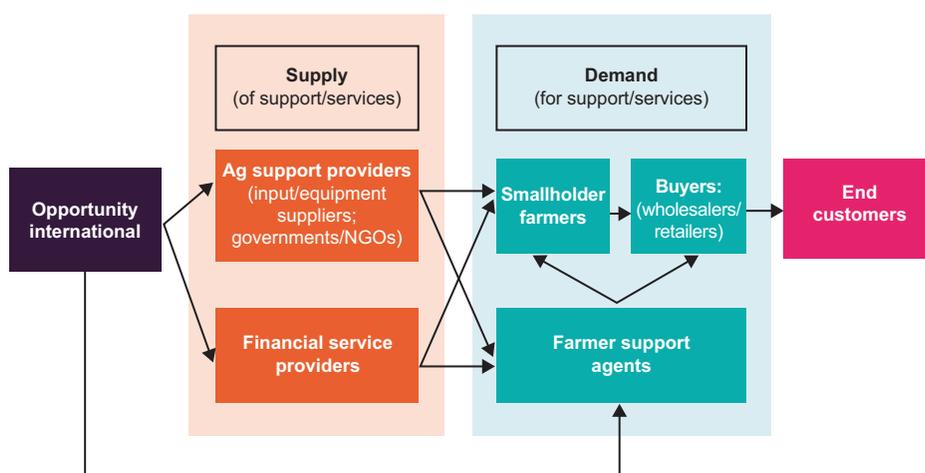


Figure 1 Opportunity AgFinance model

FSAs, moreover, generate data used to analyse effective outreach and to support loan client recruitment using technology designed and introduced by Opportunity. FSAs are incentivized to identify and recruit potential borrowers from among the farmers trained, and they use data to accomplish this. They capture basic data from farmers (land size cultivated in the target crop, demographic data including poverty level, information about past and current loans of any kind, savings or digital accounts, training attendance and engagement, as well as their qualitative assessment of the farmer's character based on community references, observation of the farmer's cultivation skills and practices, and behaviour while interacting with the FSA and other farmers). In addition to helping farmers join or strengthen their groups in preparation for group guarantees, they also record the capacity and strength of the groups. This data is then used in the initial screening of farmers and groups for referral to FSPs – banks, savings and loans companies, rural finance cooperatives, and so on. It is also used, in aggregate, for tracking programme outreach and performance. For farmers who become clients, the FSAs continue to capture data on farm and loan performance, engagement with FSAs and other farmers, additional training attendance, loan repayments, and farm performance. Attempts are being made for FSAs to also capture financial data, which is more challenging. The data captured is being aggregated into a credit scoring system being tested to make repeat loan processing more efficient. The FSAs, thus, also perform cost-effective data capture, which can then be used increasingly by financial service providers. In the pilot, the partner bank relied heavily on FSA recommendations – which they viewed as an endorsement by Opportunity – and on the 15 per cent guarantee that Opportunity offered to serve small-scale farmers.

In the course of testing the financial and institutional sustainability of this model, the programme brought costs down and brought in market stakeholders. First, FSA financial incentives are tied to farmer data capture, training attendance, farmer visits,

and bank accounts opened. Efforts to bring FSA costs down has brought costs down from \$54 per client served (in Uganda in 2014) to \$12 (incorporating Uganda and Malawi data in 2021), with costs projected to decline to under \$7 per client by 2024. These costs include staff and overheads as well as direct FSA costs. Second, the goal has been to demonstrate to banks, input suppliers, farmer cooperatives, and buyers, who benefit from the FSA network, that they can afford to manage the network and/or pay other stakeholders to do so. In Malawi, for example, the out-grower contributed to FSA incentives. As the business case for the H3 approach develops, the out-grower stakeholder is considering charging a commission to input suppliers to help pay for FSA services. To enhance the value proposition to stakeholders, the data captured by FSAs can be displayed on clear digital business intelligence dashboards. What incentives stakeholders will put into place for the FSAs and how stakeholders can be incentivized to sustain the holistic services delivered by FSAs remain topics for future research – aligning the model to more deeply intersect with market systems.

Even as the high-tech aspects of the H3 approach are enabling breakthroughs, the high-touch components remain important. Lessons from the FSA programme in Malawi, along with other agricultural projects, include the following:

- Well-established, formal sector agribusiness can deliver poor quality inputs and services and should be monitored as much as other, smaller agribusinesses.
- Partnerships between formal financial institutions and farmer-intermediaries need to be carefully handled, with the timing of financing kept at the forefront of bank managers' minds.
- Appropriate initial community outreach and communication (marketing) are critical to success, and outreach messages need to continue throughout the programme.
- Training is a separate service from finance, even though it can be sequenced with access to finance. In implementing bundled business models, farmers may still wish to select from among various services, and effective training is supported by monitoring separately from finance.
- In-person FSA monitoring of farmer agricultural, financial, and social progress and challenges is a crucial benefit of the FSA service. Monitoring information – quantitative and qualitative – helps programme managers design and deliver additional training and support and provides assurances to lenders that any issues with borrowers will be identified and addressed early to support repayment.

Learnings from this pilot period are establishing proof of concept for end-users and closing the gaps in the revenue model for multistakeholder partnerships.

Business model part 2: decreasing cost and risk for financial service providers

The second core part is the business model for financial service providers (FSPs) and value chain businesses – input suppliers and off-takers/buyers. Here, we focus on FSPs, although a similar approach is at work with agricultural support providers. For FSPs, ICT applications embodied in the H3 approach offer unique

value in reducing FSP cost and risk, which are the most critical barriers for reaching low-asset farmers, women, and youth. Profiled here are four different IT interventions that support FSPs through community-based agents (FSAs) to better serve marginalized farmers.

First, digital finance connects clients with banking services. As is now widely recognized, digital finance is key to helping rural people gain access to formal financial services as the cost of physically reaching dispersed populations is simply too high. Given that cell phone technology is increasingly ubiquitous in Africa, it seems mobile money and cell phone banking platforms will be accessible to most, if not all, rural people in the coming years. To be sure, there is still a 7 per cent gap in digital inclusion between men and women; and less educated and people living in extreme poverty are slower to gain access. Yet, cell phone banking is becoming more essential now, in the COVID era, and everyone is encouraged to use digital transactions over cash (Demirgüç-Kunt et al., 2018). In the H3 approach, FSPs train FSAs to use FSP digital finance platforms. FSAs then pass this training on to clients, along with digital financial literacy training customized to reach women and less literate populations.

Second, farmer data capture supports client segmentation and may enable credit scoring. FSAs capture farmer data on smartphones using customized software. As farmers attend trainings, save, and participate in group meetings, more data is captured. Farmers share this data, generally, in hopes of obtaining a loan, or out of obligation for the free training they receive. This data, in turn, can be used to pre-screen clients for FSPs. For example, although banks do not recognize farmers' track records with saving and loan groups or microfinance institutions (MFIs), the FSAs make a record of any financial dealings and use that data to recommend farmers to the banks for financing. As more data is captured, for example loan transactions with banks, more sophisticated credit scoring can be facilitated. This is currently being tested in Uganda and Malawi, as alternative credit scoring is not yet widely accepted in the marketplace.

Third, tablet-based data capture facilitates efficient and quality in-field client registration, account opening, and loan application. Some elements of farmer data captured by FSAs are transferred to bank staff, who receive it on Android tablets as good prospects. These staff follow-up, and can use their tablet technology for client registrations, account applications, and loan agreement processing on location, to save the farmer trips to the bank. This technology merges the benefits of fintech processes with a hands-on approach that better reaches rural, lower-income farmers, and less literate women and youth.

Fourth, satellite imaging is being tested to support remote monitoring and guarantee funds. When farmers receive a loan, FSAs geo-map their land, and various stakeholders using satellite imaging can then observe the farm. This system promises to help FSAs determine which farmers need a monitoring visit, thus reducing costly, unnecessary visits and reducing risk by focusing monitoring on farmers most in need. In addition, satellite imaging can provide evidence of crop destruction, which

would trigger the activation of an inclusive guarantee fund, which acts as insurance for the bank and farmer. This system is in the early development stage.

Markets: working in markets that are home to the target population

Most agricultural finance initiatives work to drive formal, highly structured value chains to reach down market, but the H3 market systems approach also works to bring higher value to less structured markets that are home to marginalized populations – people facing poverty, gender, and age barriers to economic security. Agricultural finance is often extended in the context of closed, or tight partnership models in which one company provides inputs, training, and marketing services, simply subcontracting farmers for production. Banks prefer these closed financing arrangements because the intermediary has a financial stake in the partnership, carefully selects economically secure farmers, and provides a full package of support (Opportunity International, 2016; ISF Advisors, 2020). However, an FSA system can provide similar assurances in less formal markets. FSAs carefully select farmers and use digitally captured data to screen farmers to refer them to banks. They train farmers in both good agricultural practices and financial management and regularly monitor farmer progress – using technology and field visits. These steps reduce risk. Digital data from farmer borrowers help banks to better monitor clients as well. Looking forward, Opportunity is conducting experiments with automated credit scoring and other technology to further reduce cost and risk for FSPs. Because of the low cost of the FSA network, it is affordable even with generally lower profit margins in less structured, more competitive markets. With these elements in place, the FSA network approach can function well in unstructured markets where partnership arrangements do not hold up, but where marginalized people are easy to target. These markets also tend to be local food markets – vegetables, fruit, rice, maize, potatoes – while more structured markets tend to be export-oriented or to depend on large processing plants – cocoa, coffee, tobacco, sugar.

Opportunity's AgFinance programme in Malawi operated in an unstructured market. FSAs provided a comprehensive support package to help farmers grow and sell soy – used for chicken feed – through a loosely structured out-grower scheme in which the out-growing company supplied inputs and training but did not obligate farmers to market through them. Rather, FSAs assisted farmer groups to aggregate crops, and to arrange and negotiate sale prices. Farmers were thus able to obtain a premium price of Malawi Kwacha 285/kg (\$0.35/kg) vs. the market price of 260/kg (\$0.32/kg), even marketing through less structured channels.

Another strategy for working with farmers where they are 'at home' is to partner with institutions that have the closest outreach to the target population and improve their service bundle. When it comes to selecting financial institutions to work with farmers, Opportunity tends to select partners that are already home in some way to small-scale farmers. Opportunity's historical savings and loans partners emerged from the consolidation of MFIs that work with economically marginalized populations, especially women. As Opportunity branches out beyond these

founding partners of the AgFinance programme, new institutions that already serve small-scale farmers are prioritized. For example, Opportunity recently entered a non-legacy partnership in Rwanda with CleCam EjoHeza, an MFI resulting from the merger, in 2007, of two older MFIs. It is easier to help these institutions to reach further down market to reach the very poor, more women and youth, than to do so with a large, established private bank, for whom small-scale farmers are a new customer group altogether (Cruz Zuniga et al., 2019).

H3 programme interventions

Although the goal of any market system approach is to facilitate markets – rather than interrupt them through too much direct intervention – the H3 approach seems to require a demonstration period of direct intervention. Direct implementation for a demonstration period is useful for adapting the technology system to the human context of different situations and adjusting the programme impact goals according to the context. The technological context may also influence the technology itself – for example, the capacity of mobile network operators to handle large volumes of interactive voice response calls at once, and so on. Once demonstrated to key stakeholders, however, the strategy is to coach these key stakeholders to adopt and pay for the FSA system. The candidate stakeholders are the financial service providers, the input suppliers or buyers, or the farmers, usually through cooperatives or associations – all of whom benefit from FSAs and the ICT systems that support FSA finance, bearing in mind that input suppliers and buyers often provide farmer financing. Opportunity is still in the phase of demonstrating the business model to these stakeholders and bringing costs down to levels that can fit in the margins of lower-value crop markets.

In implementing this H3 market systems approach, Opportunity AgFinance engages in three key interventions: technical assistance/coaching, technology development, and capital facilitation. The technical advice and coaching use standardized practices captured in Opportunity toolkits, but coach in a very customized way. Opportunity developed the ICT platforms for the model and is disseminating them to other partners in target markets. Opportunity is facilitating access to impact investment funds. Finally, Opportunity designs inclusive guarantee schemes that not only protect FSPs but also reduce collateral requirements and interest rates for farmers.

The Inclusive Loan Guarantees bear further comment because they are designed to reduce risk not only for FSPs but also for farmers themselves. Some guarantees are re-structured versions of existing guarantee schemes, while others are Opportunity backed. Depending on the funder and partner, they guarantee loans for women, young farmers, climate-smart agriculture, or small-scale-farmers in general. The guarantees are partial and the process for accessing the guarantee is much faster and simpler than typical loan guarantee mechanisms. Most significantly, the guarantees benefit farmers by requiring FSPs to offer lower asset requirements or lower interest rates to clients whose loans are guaranteed. In this way, the guarantees benefit the clients as well as the FSPs.

Lessons and resources

Among the insights shared in this article, the following critical guidance is most pertinent to implementing an H3 approach to agricultural finance using community-based agents such as FSAs:

1. *Innovate around both technology and human engagement.* Innovations are central to both the high-tech and high-touch aspects of the model, and major innovations are needed to advance scale and financial viability to address the major poverty challenges of the COVID-19 era in Africa.
2. *Start where the target population works.* Start with the target population and help them move from where they are to their next steps on their journey to rural prosperity. From a poverty eradication perspective, there is no point in expanding rural finance unless it works for people who need it as a tool to escape poverty and inequality.
3. *Role model the FSA approach in programme management.* The FSA approach, when effective, is democratic and participatory, engaging, and respectful. It is efficient, but not hierarchical. Rural clients are treated with respect and the process opens avenues for empowerment, agency, and prosperity. Role modelling these principles in programme operations motivates staff, partners, FSAs, and ultimately farmers as well.

Resources for practitioners

Some of these are articulated in more detail in Opportunity Toolkits, which are being issued with increasing frequency. These can be found on the Opportunity AgFinance website (<https://opportunity.org/what-we-do/agriculture-finance>). Other lessons from research and analysis can be found on the Opportunity Knowledge Management website (<https://opportunity.org/news/publications/knowledge-exchange/>). Documents particularly related to the content covered here include:

- ‘Bankers Guide to Agricultural Finance’, available upon request.
- ‘Agro-Dealer Access-to-Finance Coaching Curriculum – Uganda’, Opportunity International and CRS, available upon request.
- ‘Trainers’ Guide to Farming as an Inclusive Family Business’, available upon request.
- Client Journey Mapping tool, applied by Sinapi Aba Savings and Loans (SASL) and Opportunity International Savings and Loans (OISL) in Ghana, 2017 (SASL et al., 2017).
- Digital Client Engagement: Interactive Voice Response (Opportunity International, 2019b).
- AgFinance Positively Impacts Small-scale Farmers in Ghana: rigorous, independent research published in 2019 (Opportunity International, 2019a).
- Opportunity Agricultural Finance: Value Chain Partnerships in Practice in Ghana and Uganda, 2016 (Opportunity International, 2016).

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