



Case Study

Entry Points for Targeted Digital Finance Services for Smallholder Farmers in the Democratic Republic of Congo

JengaLab



TechChange



DEVELOPMENT
GATEWAY
An IREX Venture

CASE STUDY: ENTRY POINTS FOR TARGETED DIGITAL FINANCE SERVICES FOR SMALLHOLDER FARMERS IN THE DEMOCRATIC REPUBLIC OF CONGO

JULY 2023

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The Digital Advisory Support Services for Accelerated Rural Transformation (DAS) Program is a facility funded by a grant from the International Fund for Agricultural Development (IFAD). The DAS consortium of partners includes Development Gateway: an IREX Venture, Tech Change, and JengaLab.

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LIST OF ABBREVIATIONS

AVENIR	Empowerment through Nutrition-sensitive, Inclusive, and Resilient Agricultural and Rural Entrepreneurship Project
DFS	Digital financial services
DRC	The Democratic Republic of the Congo
FSP	Financial service provider
IFAD	The International Fund for Agricultural Development
KYC	Know Your Customer
MFI	Microfinance institution
MNO	Mobile network operators
RCS	Rural coverage sites
SSADR	Sector Strategy for Agriculture and Rural Development
UNCDF	The United Nations Capital Development Fund

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INTRODUCTION AND BACKGROUND

In May 2022, the International Fund for Agricultural Development (IFAD), World Food Program, and partners began to design a new program, the Empowerment through Nutrition-sensitive, Inclusive, and Resilient Agricultural and Rural Entrepreneurship (AVENIR) project. The AVENIR project will contribute to the reduction of rural poverty and improve the nutrition of rural populations in the Democratic Republic of the Congo (DRC). Over a seven-year implementation period (2023 to 2029), AVENIR will focus on transforming family farming, inclusive agricultural and rural entrepreneurship, and opening up territorial markets.

Part of the AVENIR project seeks to address inclusive agricultural and rural entrepreneurship by improving the conditions for access to rural finance. As a result, the Digital Advisory Support Services for Accelerated Rural Transformation (DAS) facility conducted a brief assessment of DRC's digital finance ecosystem, identifying entry points and potential partners that could be integrated into the program design and would support the AVENIR project in pursuing its goals.¹

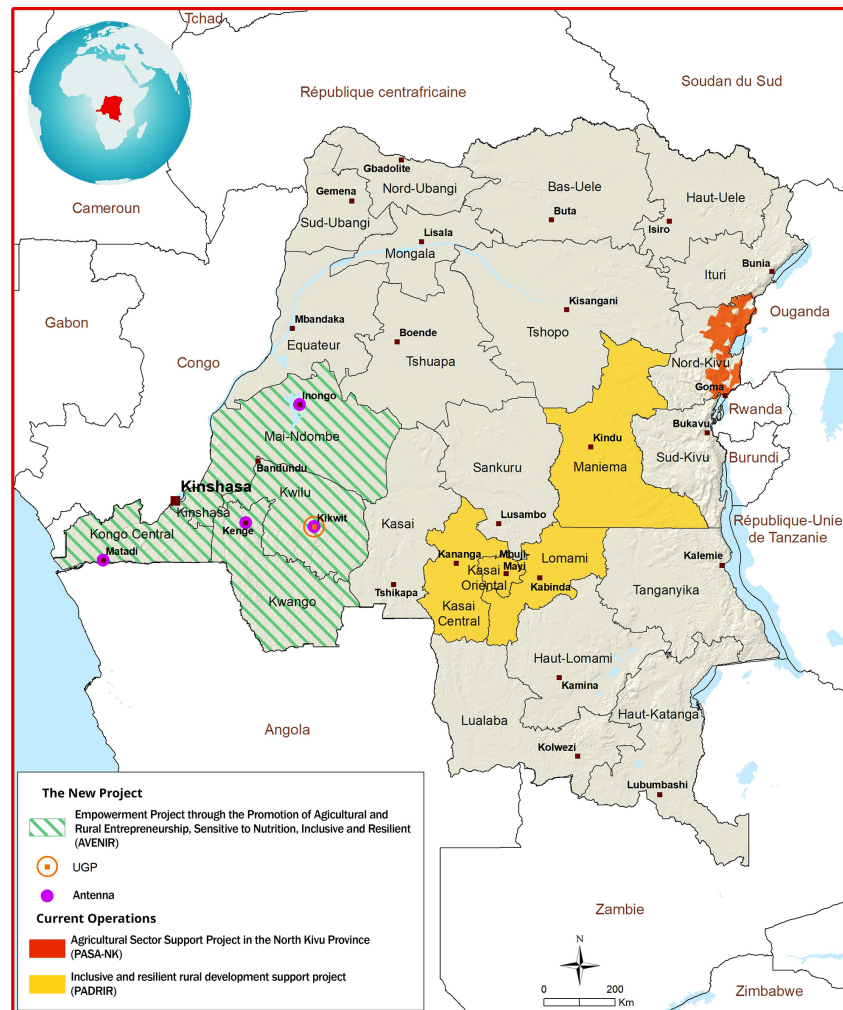


Figure 1: Map highlighting interventions under AVENIR (green) in the four provinces surrounding Kinshasa: Kongo Central, Kwango, Kwilu, and MaiNdombe.

¹ Empowerment through Nutrition-sensitive, Inclusive and Resilient Agricultural and Rural Entrepreneurship Rapport de conception, 2022. <https://www.ifad.org/en/-/democratic-republic-of-the-congo-2000003920-avenir-project-design-report-november-2022>

This study highlights key discoveries from the assessment, including challenges, opportunities, and recommended next steps and partnerships for the AVENIR project. The goal of this case study is to provide inspiration for program designers, implementers, and others who want to understand some of the challenges and entry points for increasing rural finance via digital technologies and/or the digital landscape in DRC.

DRC DIGITAL LANDSCAPE

Agriculture employs 64.3% of the DRC population² who are predominantly smallholder farmers growing food crops such as cassava, maize, and cash crops such as coffee, cocoa, sugar, and palm oil. Despite the sizable population working in agriculture, the DRC has over 80 million hectares of arable land but only 10 percent is used for agriculture.³ Agriculture being an important economic sector in DRC, the 2010 [Sector Strategy for Agriculture and Rural Development \(SSADR\)](#), from the Ministry of Agriculture, is poised to drive development of the country's food system and help farmers access inputs, services, and markets.⁴ In tandem, the President's Office adopted a National Digital Transformation plan, Horizon 2025,⁵ that will see the country, especially rural areas, benefitting from initiatives geared towards increasing internet connectivity infrastructure, digital solutions, content, etc. through public-private partnerships. Both long-term plans could be streamlined to advance DRC's digital agriculture initiatives.⁶

Intermittent power supply coupled with poor or non-existent internet connectivity remains a major challenge, especially in rural areas. In terms of devices, most of the population uses feature phones that aren't internet-enabled. At the same time, radio remains the principal digital channel via which citizens obtain information. In DRC, 4G rollout and uptake have increased from 0% in 2017 to 34% in 2019, mostly in urban areas. Similarly, active mobile broadband subscribers rose from 3 to 19.5 per 100 inhabitants between 2013 and 2019. Estimates for 2020 suggest that the number of internet users has reached 19% of the total population. Challenges include intermittent power supply coupled with poor or non-existent internet connectivity, especially in rural areas.⁷ In terms of devices, most of the population uses feature

DIGITAL PENETRATION, 2019

4G ROLLOUT AND UPTAKE

0% in 2017



ACTIVE MOBILE BROADBAND SUBSCRIBERS

3% in 2013



INTERNET USERS



² Democratic Republic of the Congo: Employment in agriculture, 2019. https://www.theglobaleconomy.com/Democratic-Republic-of-the-Congo/Employment_in_agriculture/

³ Agriculture, 2022. <https://www.trade.gov/country-commercial-guides/democratic-republic-congo-agriculture>

⁴ Democratic Republic of Congo Agriculture Investment Opportunities Brief. <https://www.abghq.com/downloads/DRC.pdf>

⁵ National Digital Transformation Plan, Horizon 2025: https://www.presidence.cd/services/1/plan_national_du_numerique_horizon_2025

⁶ Idem <https://ictpolicyafrica.org/pt/document/96113jhbqxm>

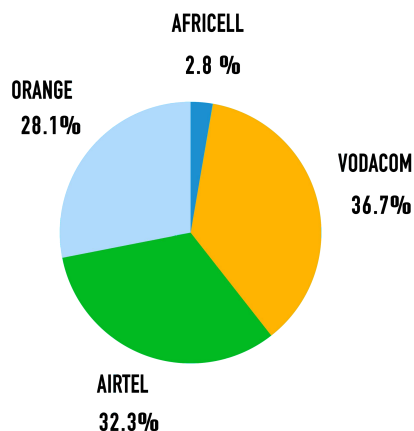
⁷ Status of Digital Agriculture in Africa: <http://www.ictworks.org/wp-content/uploads/2022/04/digital-agriculture-47-African-countries.pdf>

phones that are not internet-enabled. At the same time, radio remains the principal digital channel via which citizens obtain information.

DRC's mobile telephony landscape is dominated by four mobile network operators (MNOs) namely Vodacom (36.7% of the market share), Airtel (32.3%), Orange (28.1%), and Africell (2.8%). These MNOs offer a range of services, mobile financial services (i.e. mobile money) included. With only 4% of the population reported to have an official bank account, the majority have turned to mobile money services. As a result, during the first quarter of 2020, mobile money services grew to 9.2% where they are available across the country.⁸

Specific to the telecommunications sector, available mobile money services are M-PESA through Vodacom, Airtel Money through Airtel, and Orange Money offered by Orange. These each predominantly offer cash-in, cash-out and, to a modest extent, utility bill payments. These mobile wallets also enable transacting with merchants and remittance transfers. Unfortunately, most of these services are only available in urban and peri-urban areas. With less than 20 percent of the population accessing mobile broadband services (Figure 1), the potential for mobile money is limited, particularly in rural areas.

MARKET SHARE OF MOBILE NETWORK OPERATIONS



Mobile Money Terminology

Mobile wallet – An account that is primarily accessed using a mobile phone

Cash-in – The process by which a customer credits his account with cash. This is usually via an agent who takes the cash and credits the customer's mobile money account.

Cash-out – The process by which a customer deducts cash from his mobile money account. This is usually via an agent who gives the customer cash in exchange for a transfer from the customer's mobile money account.

PROGRAM DESIGN CONTEXT

A major component of the AVENIR project focuses on inclusive agricultural and rural entrepreneurship. AVENIR seeks to support rural and agricultural entrepreneurs and enterprises in accessing finance and other services for the betterment of their core business (which is farming and other agricultural value chain activities such as processing).

IFAD conducted similar interventions in other geographies that culminated in the production of a 'how-to' guide. This guide can help other actors design digital financial services interventions aimed at smallholder farmers. Insights gathered from the literature and the field mission on how the AVENIR project could further advance access to finance are assessed through the lens of the IFAD how-to guide.

Figure 2: Preconditions for IFAD's Engagement and Support – Digital Financial Services



As illustrated in Figure 2, IFAD has identified four main preconditions to be considered during the design of DFS interventions. Using these preconditions as a guide for assessment, IFAD teams can better understand the level of readiness needed for deployment of digital financial platforms and the conditions for success. For the purposes of this case study, the stakeholder identification and engagement precondition is not covered.

a. Demand Assessment

The demand assessment is designed to identify levels of interest, stakeholder financial and digital literacy, and market characteristics that will lead to successful implementation.

The demand assessment in DRC found that smallholder farmers in rural areas face a number of key challenges in accessing credit. These include high interest rates, existing financial products not targeted to agricultural needs, burdensome documentation requirements, lack of a sufficient guarantee, and the weak physical presence of banks and microfinance institutions in rural areas. At the same time, the agriculture sector in DRC is known for being cash-intensive. During the field mission, it was also noted that the demand for financial services in the four provinces is relatively low because of poor financial literacy and a lack of experience.

b. Financial Services Landscape Assessment

A financial services landscape assessment evaluates the coverage of formal and informal financial services in rural areas and associated gaps that impact smallholder farmers.

In terms of financial services providers (FSPs), the DRC financial sector is dominated by commercial banks, although microfinance institutions (MFIs) are on the rise. According to the Central Bank of Congo, as of the end of 2019, 15 banks and 22 MFIs were licensed to operate across the country. The banks include Access Bank, Advans Banque, Afriland First Banque, Bank of Africa, EquityBCDC Bank, BGFIBank Group, Citigroup Congo, Ecobank DRC, FBN Bank, RawBank, Sofibank, Solidarity Bank, Standard Bank, Trust Merchant Bank, and United Bank for Africa DRC. Prominent MFIs include FINCA DRC, VisionFund, and Baobab (Oxus).¹¹

The presence of FSPs in the four AVENIR target provinces is limited. In Kwilu, Kwango, and Mai Ndombe, bank branch penetration remains low due to high costs stemming from infrastructural constraints and low demand for financial services and products. In the absence of the physical presence of FSPs through branches, the alternative has been to rely on an agent model through which agents partner with banks and other FSPs to offer services (i.e. cash-in and cash-out) to merchants and farmers. For example, in Mai Ndombe, no banks have physical branches and all banks operate via the agent model. Agent models play a key role in lowering the cost of delivering financial services and reaching the underbanked populations.¹²

¹¹ BCC Annual Report, 2020. <https://www.bcc.cd/publications/rapports-annuels/rapport-annuel-2020>

¹²The Use of Agents by Digital Financial Service Providers, 2020. <https://www.cgap.org/research/publication/use-of-agents-digital-financial-services-providers>

Figure 3: The Cash-in Process

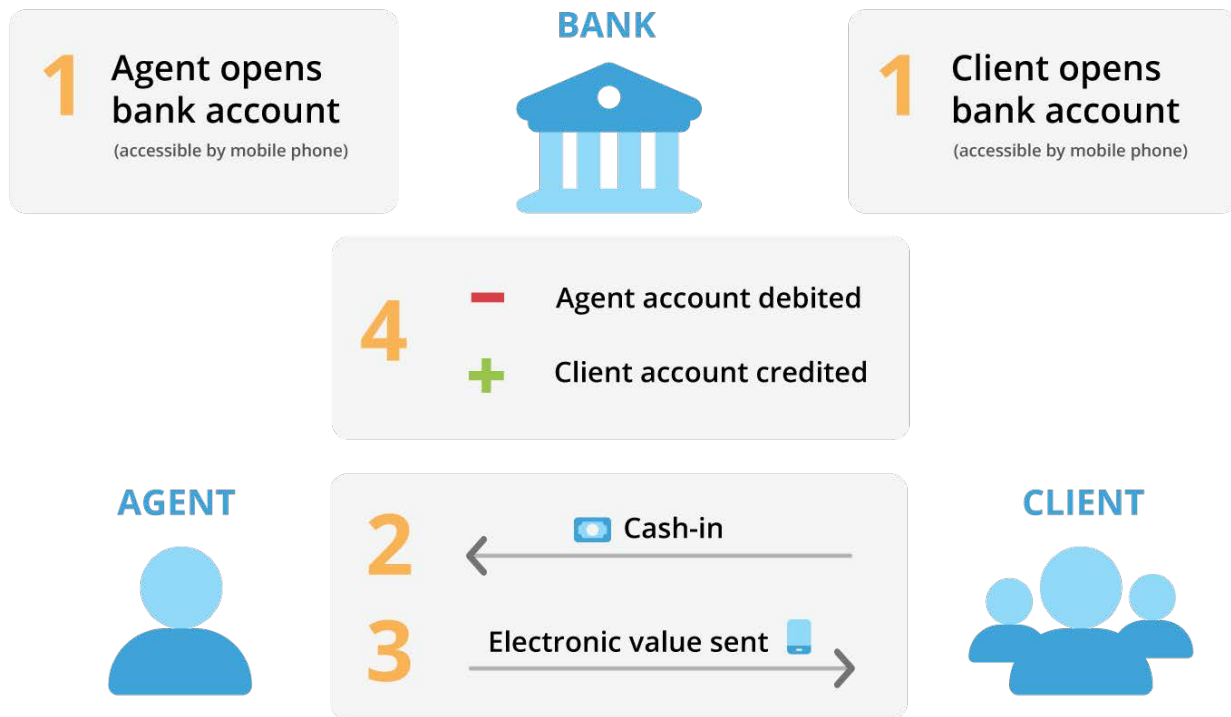


Illustration of a typical cash-in transaction

With respect to MFIs, Guilgal has a presence in Kongo Central (Kimpese) and Kwilu (Kikwit). The MFI has about 40 clients in the former province and dozens of clients in the latter province. Credit Ya Mpa, another MFI, has about 2,000 local clients in Kwilu. FINCA, one of the largest MFIs in DRC, has massive operations in Kinshasa and Congo Central. However, FINCA has opted to use, at a small scale, the agent model in the regions of Kwango, Kwilu, and Mai Ndombe.

Despite the large proportion of the DRC workforce involved in agriculture, few specific financial products are available to smallholder farmers. The currently available credit products also do not meet smallholder farmers' requirements. Credit is offered at prohibitively high interest rates, which remain uneven across financial actors. Monthly interest rates can range from 2% to 24% for banks and MFIs. Furthermore, repayment periods are short and do not consider crop harvest cycles, which would allow farmers to repay loans after harvesting and selling their produce.

Nonetheless, Equity Bank is among the few banks that invest in agriculture by offering loans to farming cooperatives which, in turn, lend to their members and other affiliated service providers such as agro-dealers. FINCA is also working on a pilot initiative to offer agricultural savings and loan products via Vodacom's M-PESA mobile wallet.

affiliated services providers such as Agrodealers. Of late, FINCA has been exploring the launch of saving and loans products via Vodacom's M-PESA mobile wallet. This partnership¹⁴ is still at the exploration or pilot stage.

c. Digital Payments Landscape Assessment

An assessment of the regulatory environment, technical infrastructure, and potential distribution networks, specifically in rural areas

To date, DRC Central Bank has granted mobile money transaction licences to four MNOs, namely, Vodacom, Airtel, Orange and AfriMobile. Approximately one-fifth of the population reports having used mobile money or conducting transactions via mobile money services. However, users are still mostly cash-in and cash-out. For users to benefit from improved financial services such as credit, they need to open an account with an FSP. By opening a bank account, clients build a track record of transactions which elevates their creditworthiness. This requirement for credit history to access improved financial services leads to the exclusion of unbanked or underbanked smallholders who represent an important number of the rural population.

Although there is optimism around leveraging mobile money services to advance financial inclusion for rural populations in DRC, the current infrastructure inhibits such ambitions. As previously noted, in some areas, there is no network coverage at all. Understandably, mobile money services cannot function in these areas. Furthermore, poor infrastructure and internet connectivity prohibit the movement of goods and money from Kinshasa to the provinces. MNOs such as Vodacom are working to expand their rural network coverage by setting up [solar-powered rural coverage sites \(RCS\)](#). Similarly, the government has plans to further develop rural internet connectivity infrastructure upon which financial services sit.

There is only one case of an MFI (FINCA) partnering with an MNO (Vodacom) to offer financial services. During the project design field mission, Vodacom noted that there are independent private aggregators that offer integration with various mobile wallets through payment gateways to ease the integration of digital financial services while targeting last-mile users (e.g. smallholders, merchants, etc.).

Airtel, another MNO, operates via a well-structured network. The users of Airtel money cash-in and cash-out from Airtel agents' shops spread across the country. Agents, in turn, work closely with dealers and super dealers. To offer improved services to subscribers, Airtel is currently in talks with RAW Bank to offer loans and saving products via Airtel money (i.e., wallet to bank, bank to wallet).

Partnerships between FSPs and incubators are also emerging in DRC. Incubators, such as Kobo Hub¹⁵ or Lumumba Lab,¹⁶ have entered into a partnership with Equity Bank DRC to onboard and train farmers and merchants involved in agriculture activities. The incubators are financed to conduct customer acquisition and onboarding by activating a new user's bank account. As part of efforts to help farmers capture transactional data that is required for access to credit scoring, Kobo Hub is developing a

¹⁴ <https://finca.cd/produits/lona-o-defa/>

¹⁵ <https://kobo-hub.com/>

¹⁶ <https://web.llab.cd/>

cooperative management system that will allow agriculture cooperatives to digitally capture data about their operations, sales, membership, etc.

Kobo Hub is also working, as part of their FinTech thematic group, with Visa to distribute payment cards to entrepreneurs and SMEs, some of which are farmers. These cards are linked to mobile wallets to allow the transfer of money between the two. To date, they have distributed a thousand cards, mostly to entrepreneurs venturing into agriculture and retail. Women represent about 40% of active card users. Kobo Hub is in discussion with Visa about the possibility of rolling out this program at the national level, and with a particular focus on entrepreneurs in the agriculture sector. This is an entry point for the AVENIR project to reach women beneficiaries who are venturing into farming and need financial support. These initiatives at Kobo Hub are still at an early stage and predominantly focus on the city of Kinshasa and its periphery.

Figure 4: Proposed distribution model for digital and non-digital financial services

	Onboarding	Product Delivery Channels	Progression
Kinshasa	Banks MFIs Agent networks Partner with incubators	Bank Bank – Telcos Bank – MFIs Bank – MFIs – Telcos	Loan Saving Insurance
Kongo-Central	Banks MFIs Agent networks Partner with incubators	Bank Bank – Telcos Bank – MFIs Bank – MFIs – Telcos	Loan Saving Insurance
Kwango	MFIs Agent networks	MFIs – Agents MFIs – Telcos – Agents	Loan Saving
Kwilu	MFIs Agent networks	Bank – MFIs – MFIs – Agents MFIs – Telcos – Agents	Loan Saving
Mai-Ndombe	MFIs Agent networks	Bank – Telcos – Agents MFIs – Agents	Loan Saving

Figure 4 illustrates possible distribution models for digital and non-digital financial services. The listed stakeholders could potentially play the following roles:

- Banks: disburser (directly or via MFIs/Telcos), cash-in and cash-out, and credit scoring.
- MFIs: disburser, cash-in and cash-out, initial credit scoring, KYC (Know Your Customer).
- Telcos: delivery via mobile wallet, provider of alternative data for credit scoring (i.e. mobile wallet transactions, airtime loading and consumption) for KYC.
- IFAD and partners: Loan first-loss buffer, co-financier, etc.

RECOMMENDATIONS

Efforts to integrate digital technologies under the AVENIR project may be pursued by focusing on the following proposed steps.

Further Assessments

- Conduct an in-depth analysis to understand the potential size of the market in the target provinces in need of agricultural financial products, which could be pursued in partnerships with FSPs.
- Determine the level of smallholder literacy, including functional (reading, writing), financial (knowledge of/experience with financial services), and digital (knowledge of/experience with digital technologies), which are key for the uptake of DFS.
- Pinpoint the availability of agricultural subsidies and social cash transfers and the disbursement channels used. If digital, then pursue integration or upgrade.
- Identify data-sharing models between agribusinesses, FSPs, government, etc. that would allow the creation of economic identities, which previously unbanked farmers can use to access financial products and services. Here, Rural Invest¹⁷ can play a critical role by helping to capture agricultural business data required for credit profiling.
- Digital technologies can only be used to extend financial products to interested farmers. It is thus important to ensure financial products (e.g. savings, loans) are tailored to agricultural needs and are affordable, accessible, and economically viable.
- Value chains or crops have very peculiar challenges, hence the need to map specific crops against financial needs, then propose relevant and timely financial products (e.g. labour financing, input financing, asset financing, post-harvest financing) to farmers.

Potential Partnerships

- Incubators are already working with FSPs to onboard farmers and merchants involved in agriculture-related activities. They can continue to play an intermediary role to deploy digitally literate teams that may help with farmers' onboarding, training, and support as they sign up for DFS. AVENIR should engage more directly with the incubators to understand the specific role they can play, in line with DFS awareness-raising, uptake, and inclusion (e.g. women, youth).
- Engage with the United Nations Capital Development Fund (UNCDF) to know more about their upcoming national agency banking initiative rollout and explore potential synergies in the four target provinces.
- UNCDF also plans to conduct a national mapping of members in the innovation ecosystem (e.g. startups, entrepreneurs, innovation hubs, etc.) with digital and non-digital financial inclusion

¹⁷ Deep-dive research on how Rural Invest might support the targeted entrepreneurs was not completed. At the time of the design mission, the Rural Invest platform was still at an early stage (i.e. design phase, not fully in use).

innovations. Liaise with UNCDF to explore findings stemming from the four target provinces under AVENIR.

- Vodacom is currently working on disbursing microloans (relying on limited KYC and transactional data generated by M-PESA users). Approach them to gauge interests in co-designing specific agricultural microloans to serve unbanked and underbanked smallholder farmers.

ADDITIONAL READING

Bill & Melinda Gates Foundation

[Digital Financial Tools for Women Smallholder Farmers](#)

FAO

[Digital financial services for smallholder households](#)

GSMA

[Agri DFS: Emerging business models to support the financial inclusion of smallholder farmers](#)

IFAD

[How to Do Digital Financial Services for Smallholder Farmers](#)

IFC

[Digital Financial Services For Agriculture](#)

USAID

[Digital Financial Services for Agriculture Guide](#)

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