

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

JULY 2023



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.

This document has been produced with the financial assistance of IFAD. The findings, opinions, interpretations, and conclusions expressed in this publication are those of the authors and do not necessarily reflect the views of IFAD, its Executive Board, its Members, or any Member State they represent. IFAD does not guarantee the accuracy of the data included in this work. The boundaries, colors, denominations, and other information shown on any map in this work do not imply any judgment on the part of IFAD concerning the legal status of any territory or the endorsement or acceptance of such boundaries

Authors:

Claude K. Migisha, ICT4D Consultant
Victoria Blackham, Development Gateway

LIST OF ABBREVIATIONS

AVENIR	Empowerment through Nutrition-Sensitive, Inclusive, and Resilient Agricultural and Rural Entrepreneurship Project
DFS	Services Financiers Numériques
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
SSADR	Sector Strategy for Agriculture and Rural Development
UNCDF	The United Nations Capital Development Fund Agency

TABLE OF CONTENTS

Introduction and Background	5
DRC Digital Landscape	6
Program Design Context	7
Mobile Money Terminology	7
a. Demand Assessment	8
b. Financial Services Landscape Assessment	9
c. Digital Payments Landscape Assessment	11
Recommendations	13
Further Assessments	13
Potential Partnerships	13
Additional Reading	14

INTRODUCTION AND BACKGROUND

In May 2022, IFAD, the World Food Programme, and development partners designed the Nutrition-Sensitive, Inclusive, and Resilient Agricultural and Rural Entrepreneurship (AVENIR) project. The AVENIR project aims to reduce poverty and improve the nutrition of 30,000 low-income households across four rural areas in the Democratic Republic of the Congo (DRC). Over a seven-year implementation period (2023 to 2029), AVENIR will focus on transforming family farming, fostering inclusive agricultural and rural entrepreneurship, and opening up territorial markets.

The AVENIR project seeks to foster inclusive agricultural and rural entrepreneurship by improving access to rural finance. Accordingly, 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 support the AVENIR project in pursuing its goals and be integrated into its program design.¹

This case study combines insights gathered from desk research and semi-structured interviews with various stakeholders operating in the AVENIR project intervention areas. Descriptions of existing challenges, opportunities, and possible next steps that would benefit AVENIR project beneficiaries and financial ecosystem players are provided. Ultimately, this case study sheds light on the factors that are affecting access to digital financial services (DFS) and impacting rural livelihoods in the DRC. It is hoped that the study can further inform the program design or implementation plans of other actors operating in the country.



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

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>
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. the 2010 Sector Strategy for Agriculture and Rural Development (SSADR): <https://faolex.fao.org/docs/pdf/cng152686.pdf>

DRC DIGITAL LANDSCAPE

The bulk of the DRC population (64.3%)² is engaged in agriculture, particularly small-scale farming. Smallholder farmers largely cultivate staple crops such as cassava and maize as well as cash crops such as coffee, cocoa, sugar, and palm oil. Despite the sizable population working in agriculture, only 10% of the DRC's 80+ million hectares of arable land is exploited for food cultivation.³

Given the importance of agriculture in the economy, the DRC Ministry of Agriculture developed the 2010 Sector Strategy of Agriculture and Rural Development (SSADR)⁴ to drive the growth of the national food system and help farmers access inputs, services, and markets. In tandem, the President's Office adopted a national digital transformation plan called Horizon 2025.⁵ Via Horizon 2025, public-private partnerships will be established to expand internet connectivity infrastructure and bolster the uptake of digital solutions of content across all areas of the country, especially rural areas. These two long-term plans could be streamlined to advance DRC's digital agriculture initiatives.

Intermittent power supply and poor or non-existent internet connectivity remain significant challenges, especially in rural areas. For example, the majority of the population utilizes non-internet-enabled feature phones. At the same time, radio remains the principal channel through which citizens obtain information, particularly as 4G networks only cover 40% of DRC. Active mobile broadband subscribers only rose from 3 to 19.5 per 100 inhabitants between 2013 and 2019. Estimates for 2020 suggest that

-
5. National Digital Transformation Plan, Horizon 2025: https://www.presidence.cd/services/1/plan_national_du_numerique_horizon_2025
 6. Idem
 7. Accelerating Access: Deepening engagement in the digital economy in Central Asia, the Middle East and Africa: <https://impact.economist.com/perspectives/economic-development/accelerating-access-deepening-engagement-digital-economy-central-asia-middle-east-and-africa#:~:text=economy%20be%20improved%3F-,Accelerating%20Access%3A%20Deepening%20engagement%20in%20the%20digital%20economy%20in%20Central,of%20policy%20maker%20and%20business%20attention>

DIGITAL PENETRATION, 2019

4G ROLLOUT AND UPTAKE

0% in 2017



ACTIVE MOBILE BROADBAND SUBSCRIBERS

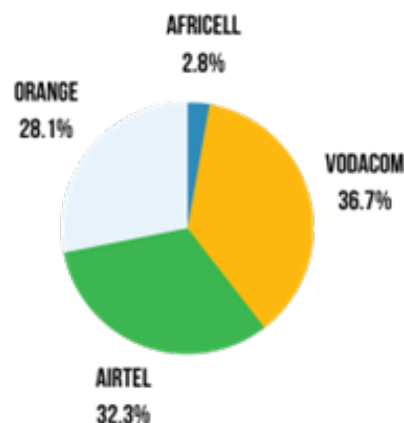
3% in 2013



INTERNET USERS



MARKET SHARE OF MOBILE NETWORK OPERATORS



19% of the total population were active internet users.

DRC's mobile telephony landscape is dominated by four mobile network operators (MNOs), namely Vodacom (36.7% market share), Airtel (32.3%), Orange (28.1%), and Africell (2.8%). The overall mobile penetration rate is estimated at 42%.

The above MNOs offer a range of services, including mobile financial services (i.e., mobile money). Since only 4% of the population own or have access to official bank accounts, many people turn to mobile money services as alternatives. During the first quarter of 2020, almost 1 in every 10 (9.2%) people used mobile money services across the country.

The available mobile money services are M-PESA (offered by Vodacom), Airtel Money (Airtel), and Orange Money (Orange). These mobile money services, or wallets, support cash-ins (deposits), cash-outs (withdrawals), and utility bill payments (to a modest extent). They also facilitate merchant transactions and remittance transfers.

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/her account with cash. This is usually done via an agent who takes the cash and credits the customer's mobile money account.

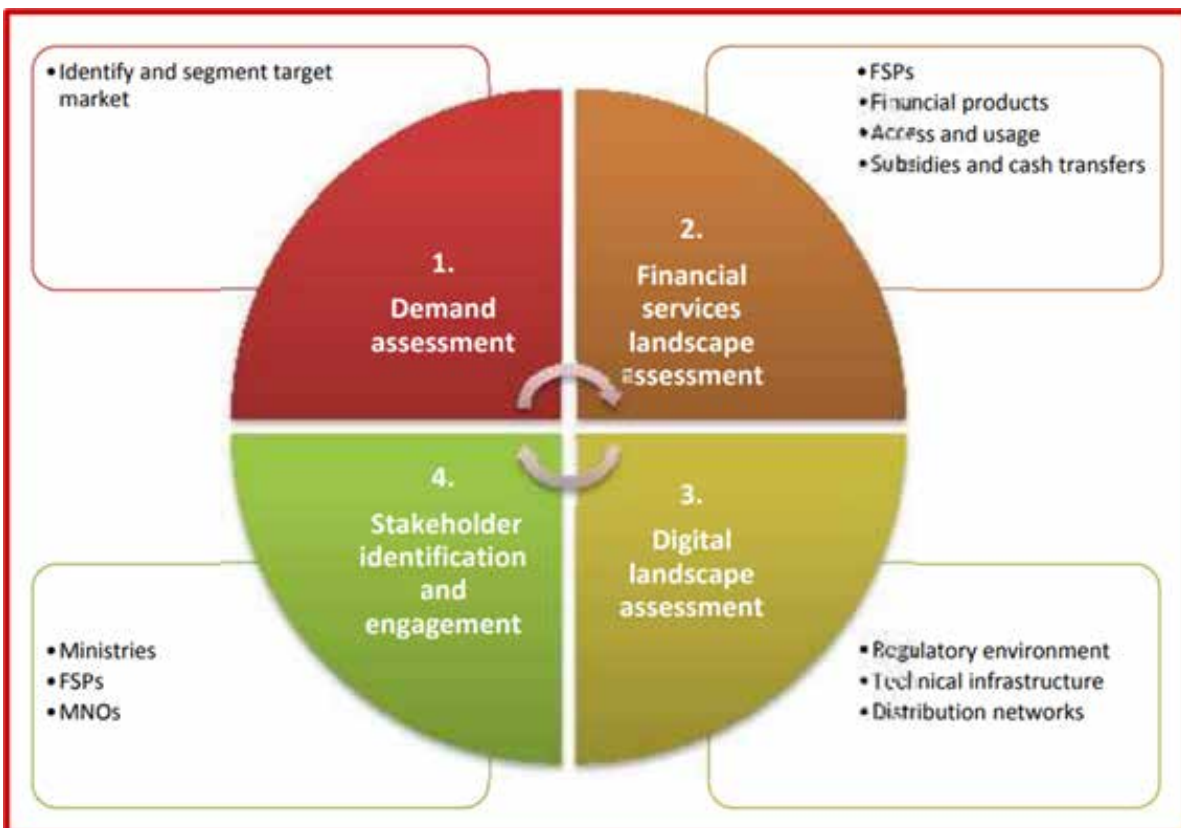
Cash-out – The process by which a customer deducts cash from his/her mobile money account. This is usually done via an agent who gives the customer cash in exchange for a transfer from the customer's mobile money account.

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 identifies levels of DFS interest, gauges stakeholder financial and digital literacy, and ascertains the market characteristics that will lead to successful implementation. The AVENIR project's demand assessment in four DRC provinces found that rural smallholder farmers face several challenges in accessing credit. These challenges include high interest rates, existing financial products not tailored to agricultural needs, burdensome documentation requirements, lack of sufficient collateral, and very few accessible bank/microfinance branches or agents. Despite being a cash-intensive economic activity, agriculture is predominantly practiced by smallholder farmers with poor financial literacy levels and low awareness of DFS, even where they exist (i.e., mobile money).

b. Financial Services Landscape Assessment

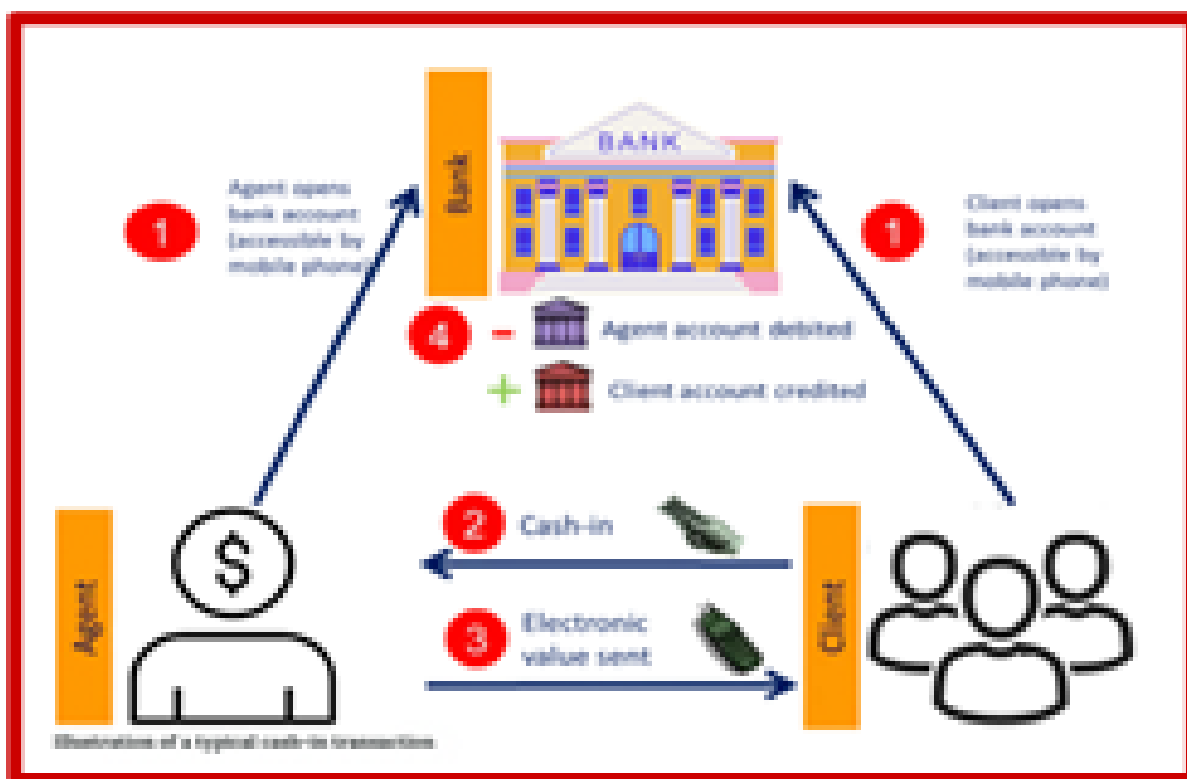
The financial services landscape assessment evaluates the coverage of formal and informal financial services in rural areas and highlights the associated gaps that impact smallholder farmers.

In terms of financial services providers (FSPs), the DRC financial sector is dominated by commercial banks, although microfinance institutions (MFIs) are progressively penetrating the market. According to the Central Bank of the Congo, 15 banks and 22 MFIs had been licensed to operate across the country at the end of 2019. The banks included 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 included FINCA DRC, VisionFund, and Baobab (Oxus).

The presence of FSPs in the four AVENIR target provinces is limited. In Kwilu, Kwango, and Mai Ndombe, there are few bank branches due to infrastructural constraints and low demand for financial services and products. In the absence of physical FSP branches, farmers have been forced to rely on agents - individuals or firms that offer cash-in and cash-out services to merchants and farmers on behalf of FSPs. For example, all banks deliver services using the agent model in Mai Ndombe (where there are no physical branches). The agent model plays a key role in lowering the cost of delivering financial services and reaching remote and underbanked farming populations.

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



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.

c. Digital Payments Landscape Assessment

This component assesses the regulatory environment, technical infrastructure, and potential distribution networks in rural areas. The Central Bank of the Congo has granted mobile money transaction licenses to four MNOs: Vodacom, Airtel, Orange, and AfriMobile. According to 2022 estimates, around 16% of adults in the DRC possess mobile money accounts. These accounts are primarily used for cash-in and cash-out transactions.

If these subscribers are to benefit from improved financial services (such as credit facilities), they will need to open accounts with an FSP. By opening a bank account, they can build a track record of transactions to elevate their creditworthiness. This will be especially critical since unbanked or underbanked smallholder farmers - who represent the bulk of the rural population - cannot access advanced financial services due to the credit history requirements of banks and MFIs.

Although there is optimism that mobile money services could be leveraged to advance the financial inclusion of rural populations in the DRC, the current infrastructure inhibits such ambitions. As previously noted, there is no network coverage at all in some areas. As such, mobile money services are unavailable in these areas. Furthermore, poor infrastructure prohibits the movement of goods and money from Kinshasa to the provinces. MNOs such as Vodacom are consequently working to expand rural network coverage by setting up solar-powered rural coverage sites. At the same time, the government has plans to further develop rural internet connectivity infrastructure to promote the rollout of DFS. The AVENIR project design field mission only identified one instance of an MFI (FINCA) partnering with an MNO (Vodacom) to offer financial services. Vodacom works with independent private aggregators to integrate various mobile wallets through payment gateways and ease delivery of digital financial services when targeting last-mile users (e.g., smallholders, merchants, etc.).

Airtel, another MNO, operates via a well-structured network. Airtel money users can access cash-in or cash-out services via agent shops spread across the country, including the four provinces of the intervention area. Agents, in turn, work closely with dealers and super dealers to service subscribers. Airtel is planning to offer mobile savings and loan products (wallet-to-bank or bank-to-wallet) in conjunction with RAW Bank.

Partnerships between FSPs and technology incubators are also emerging in DRC. Incubators like Kobo Hub and Lumumba Lab have partnered with Equity Bank DRC to onboard and train farmers and merchants involved in agricultural activities. The incubators conduct customer acquisition and onboarding by activating new user bank accounts.

For example, Kobo Hub is developing a cooperative management system that will allow agricultural cooperatives to digitally capture the transactional data needed for credit scoring (e.g., data about operations, sales, and membership). Kobo Hub is also working with Visa to distribute payment cards to entrepreneurs and small and medium-sized enterprises that may be engaged in farming. These cards, which are linked to mobile wallets, facilitate transfers between FSPs and mobile phone subscribers. A thousand cards have been distributed to entrepreneurs that are primarily venturing into agricultural and retail businesses, among which

40% are women.

Presently, Kobo Hub is in discussions with Visa to roll out the card program nationally and focus on agricultural entrepreneurs. The AVENIR project can leverage this program as an entry point to reach women who are venturing into farming and need financial support. However, Kobo Hub initiatives are still early and predominantly focus on the city of Kinshasa and peripheral areas.

Table 1: 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

Table 1 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, know your customer (KFC).
- Telcos: delivery via mobile wallet, provider of alternative data for credit scoring (i.e., mobile wallet transactions, airtime loading and consumption) for KYC.
- FAD and partners: Loan first-loss buffer, co-financier, etc.

RECOMMENDATIONS

Efforts to integrate digital technologies into rural and agriculture development programming and bolster financial inclusion, such as the AVENIR project, should follow these recommendations.

Further Assessments

- Conduct an in-depth analysis to understand market potential in specific locations, then engage key stakeholders such as MNOs and FSPs with collected evidence.
- 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). Such a determination will be vital for the design and uptake of DFS.
- Gauge the availability of agricultural subsidies and social cash transfers and evaluate the disbursement channels in use. Integration or upgrades should be pursued if digital disbursement channels are utilized.
- Identify data-sharing models between agribusinesses, FSPs, and government agencies that would facilitate the creation of economic identities that unbanked farmers can use to access financial products and services. Rural Invest can play a critical role by helping capture the agricultural business data required for credit profiling.
- Because digital technologies can only be used to extend financial products to interested farmers, ensure financial products (e.g., savings, loans) are tailored to agricultural needs and are affordable, accessible, and economically viable.
- Map the financial requirements of specific crops to inform design of crop-specific financial products (e.g., labor financing, input financing, asset financing, or post-harvest financing) offered to farmers.

Potential Partnerships

- Tech incubators that are already working with FSPs to onboard farmers and merchants involved in agriculture-related activities should continue to deploy digitally literate teams that help with farmers' onboarding, training, and support as they sign up for DFS. The incubators' role in DFS awareness raising, uptake, and inclusion (e.g., among women and the youth) is critical and can be leveraged.
- Engage with the United Nations Capital Development Fund (UNCDF) to learn more about its upcoming national agency banking initiative rollout and explore potential synergies in the four target provinces.
- UNCDF plans to nationally map members in the digital and non-digital financial innovation ecosystem (startups, entrepreneurs, innovation hubs, etc.). As such, liaise with UNCDF to explore findings 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). Gauge Vodacom's interest 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](#)



JengaLab

