

# Digital financial services for smallholder households

## Inclusive rural financial services



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United Republic of Tanzania - First Mile Project

## Introduction

Recent advances in technology and telecommunications have the potential to make financial services more accessible and affordable for smallholder households in rural areas. With digital platforms such as mobile phones, smallholders can now use financial services without having to visit a bank branch.

The number of digital financial services (DFS) is increasing, including smallholder-specific ones, as well as the number of countries in which services are available. However, there are still many barriers to uptake and use of DFS by smallholder households in most parts of the world, such as smallholders' lack of trust in digital products, limited uses for digital money and limited network coverage in rural communities.

Nonetheless, DFSs hold great promise for expanding financial inclusion among smallholder households. Recent experimentation offers key lessons for the design and delivery of suitable digital finance options for smallholder households.

## Background and context

Smallholder farmers have a variety of household and agricultural production needs. Some are small and regular (food, clothing) and others are larger and less frequent (school fees, agricultural inputs).

Smallholders need sufficient savings to meet household needs between harvests and to invest in the productivity of their farms. They struggle in meeting these needs because their incomes tend to be volatile and infrequent. Moreover, farmers are subject to a number of agricultural risks, including severe weather conditions, pests and fluctuations in the price of farming inputs and the value of cash crops.

Financial services could help smallholders fill these financial gaps, but financial service providers (FSPs) are not very present in rural communities. FSPs find it difficult to establish a business case for serving smallholder farmers because of the low levels of economic activity and poor infrastructure in rural areas. Moreover, financial products are not designed to accommodate irregular income flows.

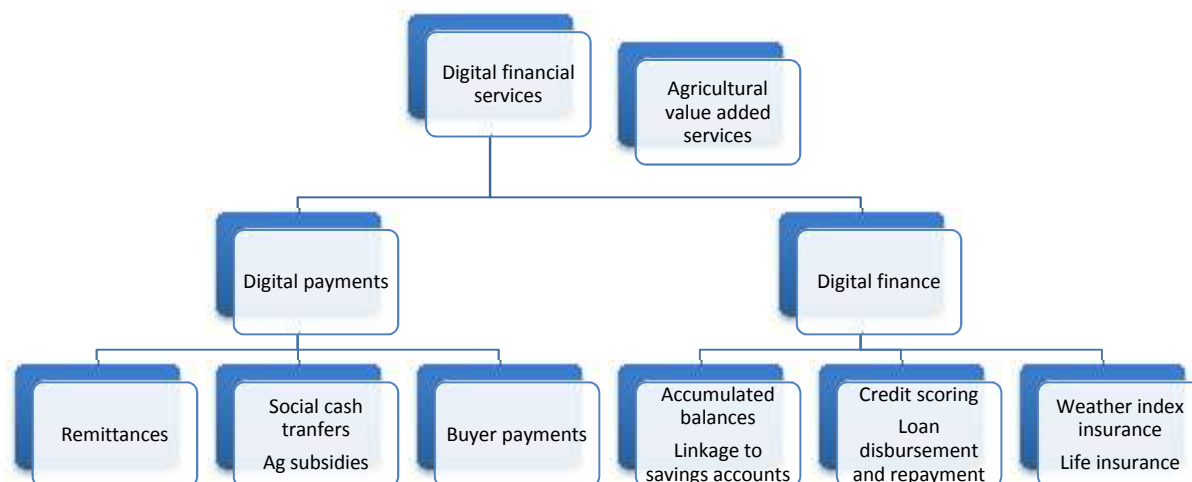
## Rationale

The growing interest in digital platforms to advance financial inclusion of smallholders stems from the suitability of digital features to address many of the “pain points”<sup>1</sup> farmers face in accessing formal financial services. Mobile money services allow farmers to carry out financial transactions without having to travel to a bank branch. Mobile wallets help farmers accumulate savings easily. Digital transactions can be used to create credit histories for the unbanked smallholders, thereby facilitating access to credit for the purchase of agricultural inputs and assets. Insurance products can be easily bundled with other digital financial products. The text and voice messaging features of mobile phones can provide key information to farmers to help them prepare for inclement weather or increased agricultural input prices.

As a result of these benefits, public and private actors are leveraging a variety of digital platforms to design and offer DFSs that can address the specific financial needs of smallholder households (see Figure 1). Smallholders can also benefit from a variety of DFSs that are broadly available to the unbanked.

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<sup>1</sup> Originally a term used in acupuncture, pain points is used by business consultants to describe the points at which a business or customer feels “pain”, i.e. a problem, real or perceived.



Source: Adapted from Gensker 2010.

**Figure 1: The DFSs landscape for smallholders**

## Summary of past experience

Lessons learned originate from experiences with smallholder-specific and other types of DFS:

- *Smallholders' varying financial needs.* Smallholder households vary in their needs for DFS. Households that participate in value chains might need a greater variety of DFSs, especially related to agricultural production. In contrast, subsistence farmers, who consume what they produce, might need mostly digital tools to help them save.
- *Late adoption of technology and slow scalability among rural residents.* Technologies not specifically designed for smallholder farmers might be adopted in urban areas before they are taken up in agricultural communities. But even smallholder-specific DFSs could be slow to scale up, as smallholders might be less comfortable trying out new technology and financial tools.
- *Need for iterative experimentation.* DFSs require more extensive fine-tuning as service providers learn about smallholders' needs and preferences. As a result, traditional pilot tests might not always be feasible, so providers need to build trial and error into their business plans and financial projections.
- *Few alternatives to cash.* Smallholder households that receive lump sums in digital format, from either sale of their crops or social cash transfers, might decide to cash out all their money if there are not enough options for using digital funds. By cashing out, smallholders are left exposed to the risk of theft or loss, or to the temptation of spending their savings.
- *Limited benefits of over-the-counter (OTC) transactions.* With OTC, smallholder farmers are not directly engaged with the digital tool, as they give money to an agent who then transmits it to another agent. In addition, OTC does not provide a mechanism to store value, as do mobile wallets, nor does it offer a ramp to enter the financial system and develop financial capability.

- *Building trust with below-the-line marketing.* Uptake of DFSs by smallholder farmers might require below-the-line marketing strategies, which are based on personal means of communication, such as a “word-of-mouth” approach.
- *Bundling value added services (VAS).* There is growing recognition that the mobile platform is ideal for communicating useful, complementary information to users. This is especially the case in agriculture, where information on weather and market prices can positively impact a smallholder farmer’s yield and income.
- *Need for a digital ecosystem for smallholders.* The development of a digital ecosystem, where a variety of institutions and actors in agriculture are interconnected digitally, would facilitate access to and use of DFSs by smallholders, primarily those involved in value chains.

## Challenges Opportunities and benefits

- *Few financial product choices for smallholder farmers.* Although the number of smallholder-specific products is growing, there are still few available options. Such products are needed because many of the available digital financial products offer terms not suitable to the typical fluctuations of agricultural income.
- *Lack of adequate consumer protection measures.* Smallholder farmers have few available recourse mechanisms to report transaction problems or fraud. Agents might not have adequate training to help resolve the issue, or they could even be the source of the problem.
- *Low quantity and quality of agent networks.* Access by smallholder farmers to DFS depends largely on the availability of agents. But rural areas often do not have enough agent coverage. In addition, rural agents might not have sufficient liquidity because they are far from the banks where they can reload funds. Agents who offer poor customer service can also deter uptake of DFS by smallholder households with limited experience in technology and financial products.
- *Inadequate infrastructure.* The availability and reliability of DFS depend on the robustness of the data networks in place in rural areas. Mobile connectivity is greatly expanding, even in remote areas, but there are still many countries and rural areas with limited or no connectivity.
- *Limited consumer capacity.* Smallholder farmers, especially older generations, could face significant difficulties in adopting new digital platforms if they have lower levels of basic literacy, limited or no exposure to financial services, and lack of experience with new technology.
- *Restrictive requirements.* Know-your-customer requirements have the effect of limiting access to formal financial services for unbanked smallholders, who might not have the necessary forms of identification. The cost of obtaining proper identification can be significant if smallholders must travel to a town or city for documentation.
- *Limiting regulatory frameworks.* In many countries, regulators have not yet determined what DFS will be allowed or what entities can provide the services. In a number of countries, regulators have taken a cautious approach to DFS, prohibiting non-banks, such as mobile network operators (MNOs), from offering mobile money services, thereby limiting services to partnerships between MNOs and FSPs.

- *Insufficient coordination among stakeholders.* The uptake and use of DFS by smallholders call for an environment in which DFSs are widely used. But the formation of such an environment requires coordination among a variety of stakeholders, which is developing in only a few countries.



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- *Rural reach.* Digital technologies, especially via mobile phones, can expand financial inclusion to smallholder communities where traditional FSPs have no presence.
- *Resilience and consumption smoothing.* With DFS, smallholder farmers can safely save small amounts of money and receive money transfers more rapidly. With easier and expedited access to savings and remittances, households can be better equipped to maintain their consumption of basic goods during difficult financial times.
- *Advanced planning.* Digital tools make it easier for smallholder farmers to save in advance for annual agricultural expenses, such as quality fertilizer and seed, and household expenses, such as school fees.
- *Easier and more expedient access to safety nets.* Digital platforms open the door to improved targeting and more expedient delivery of government support programmes. Mobile phones can increase access to life, health and accident insurance products, especially if insurance is bundled with other products.
- *Improved farming.* With access to agricultural insurance, smallholder farmers are not forced to sell assets when bad weather destroys their crops. Instead of replacing assets, smallholders can

invest in their farms during more prosperous times. Moreover, receiving tailored farming tips and current market prices on a mobile platform can help farmers improve their farming practices and increase their income.

- *Better access to value chains.* Greater access to digital finance could help smallholder farmers invest in their farms with a view to offering the quality and quantity desired by buyers. Digital platforms can also facilitate access to value chains by providing market linkages between farmers and potential buyers.

## Summary of key issues

### Preconditions for IFAD's engagement

Prior to supporting a project, IFAD's project design teams should evaluate the overall landscape for DFS:

- Demand assessment – identify and segment the target market.
- Financial services landscape – identify uptake and barriers to uptake of formal and informal financial services.
- Digital landscape – assess the regulatory environment, available technical infrastructure and potential distribution networks needed to deploy DFS.
- Stakeholder engagement – identify and engage those stakeholders that can contribute to developing an ecosystem for smallholder-specific DFS.

A thorough analysis of these multiple dimensions will ensure an appropriate match between demand and supply under the right conditions.

## Guidance on design and implementation

The design of smallholder-specific DFS should consider the following key characteristics:

- Smallholder households are diverse, ranging from subsistence to commercial.
- Smallholder families are economic units and have a variety of household and agricultural production needs.
- Smallholder farmers have seasonal income and thus require financial products to be tailored accordingly.
- Smallholders need ramps to financial inclusion.

Key roles for IFAD in the implementation of DFS can include:

- building a business case for offering DFS to smallholders
- encouraging below-the-line DFS marketing strategies
- providing financial and technical support to consumer education initiatives

- identifying systems and plans to minimize technological disruptions
- advocating expansion of network coverage in rural areas
- participating in the development of judicious regulations
- providing financial and technical support to train bank agents
- supporting bundling of agricultural VAS
- promoting an ecosystem of DFS for smallholder farmers.

## Brief description of the Digital Financial Services for Smallholder Households toolkit<sup>2</sup>

⇒ **Teaser:** Sets out the scope (you are here).

**How To Do Note:** Conceptualizes key issues and provides specific guidance on the design and implementation of smallholder-specific DFS.

**Lessons Learned:** Analyses past and current experiences in digital finance, with a focus on implications for smallholders.

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<sup>2</sup> All toolkits can be found at <http://www.ifad.org/knotes>



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