FinScopeInsights

AGRICULTURE INSIGHTS FROM FINSCOPE RWANDA 2016 SURVEY

FINSCOPE

AFR
ACCESS TO FINANCE RWANDA

The findings are based on the FinScope Survey Rwanda 2016

Abstract

This paper was prepared by FinMark Trust on behalf of Access to Finance Rwanda.
It summarises the uptake of financial products and services (both formal and informal) of farmers in Rwanda.

ACCESS TO FINANCE RWANDA

german cooperation
DEUTSCHE ZUSAMMENARBEIT

The MasterCard Foundation

KFW

SWEDEN

UKaid
from the British people

USAID
FROM THE AMERICAN PEOPLE

AGRICULTURE AND FINANCIAL INCLUSION IN RWANDA

FinScope 2016

ACCESS TO FINANCE RWANDA

Contents

List of tables

List of figures

Acronyms and abbreviations

AFR	Access to Finance Rwanda
ATM	Automated Teller Machine
CESS	Centre for Economic and Social Studies
BNR	National Bank of Rwanda
DFID	Department for International Development
EICV	Integrated Household Living Conditions Survey
FMT	FinMark Trust
FSDP II	Second Financial Sector Development Program II
FSP	Financial Services Providers
MFIs	Microfinance Institutions
MSME	Micro, Small and Medium Enterprises
MNO	Mobile Network Operator
NGO	Non-Governmental Organisation
NISR	National Institute of Statistics Rwanda
PPS	Probability Proportional to Size
POS	Point of Sale
SACCOs	Savings and Credit Cooperative Organisation
Telcos	Telecommunications company
VSLAs	Village Savings and Lending Associations

Executive summary

Rwandan agriculture has made great progress over the past years in terms of productivity. FinScope 2016 results show that 86% of adults in Rwanda are from households that are involved in farming activities. As such, the sector contributes to poverty reduction by enabling income generation and ensuring food security for a large part of the population. These changes are supported by the deliberate efforts by the Government of Rwanda as guided by Vision 2020 and in line with the EDPRS II targets[1]. However, farmers are still facing a number of challenges linked to the lack of access to agricultural finance, low and irregular income, high vulnerability related to seasonality, drought, and climate change, as well as location and associated remoteness, which affects their levels of financial inclusion especially in terms of low access to finance and credit, crop and livestock insurance, as well as other risk management strategies in the agricultural sector.

In total, about 86% of adults in Rwanda are from households that are involved in agricultural activities (= about 5.2 million). They depend either directly or indirectly on agriculture as their main source of income, employment, and/or main source of food security. In turn, only 14% of Rwanda's adult population is not involved in agricultural activities at all.

For the purposes of this report, farmers have been segmented into three groups, namely:

- Subsistence farmers (30% = about 1.8 million): those who are head of households and are involved in self-sufficiency agricultural activities (i.e. farming, fishing);

- Commercial farmers (9% = about 536 000): those who perceive their agricultural activities (i.e. farming, fishing) as a commercial farming business; and

- Farm workers (30% = about 1.8 million): those who receive an income from agricultural activities, including farming, fishing, and/or rural wage labour, i.e. salary/wage from a farmer. Further segmentation includes (a) those who receive their main income through rural wage labour (14% of adults in Rwanda – farm workers only), and (b) those who also receive an income from other sources, including off-farm work (16% - farm workers and off-farm).

- Note: The remaining 17% of adults who also come from households involved in farming activities are not considered here as they are neither head of households nor do they receive an income from rural wage labour, i.e. salary/wage from a farmer. As such it is difficult to determine their actual involvement in agricultural activities based on the survey conducted. Nevertheless, it is an important group which could be examined further by conducting a specially designed agricultural study.

Profile of farmers in Rwanda: Large majority of farmers are rural-based. The majority of the subsistence and commercial farmers are male, while farmer workers in Rwanda are mainly female. Subsistence farmers are usually older compared to the other groups, which relates to the fact that most of them are head of the households. In total, however, farmers in Rwanda are relatively young, especially farm workers, followed by commercial farmers. Education levels are relatively low, especially among subsistence farmers, followed by commercial farmers, and farm workers.

Financial inclusion among farmers in Rwanda: In general, financial inclusion among farmers in Rwanda is relatively high and varies between 86% and 91%. Farm workers with additional sources of income show the highest level of financial inclusion, followed by commercial and subsistence farmers. Farm workers who only rely on rural wage labour seem to be most vulnerable; they are less likely to be financially included, borrow money, have an insurance product, and/or a mobile money account. Given the high vulnerability of farmers, it is of great concern that risk coverage is very low. The large majority of farmers are not covered by an insurance product, such as livestock or crop insurance. In case of emergencies (e.g. harvest and/or livestock loss) most farmers rely on cutting down expenses and borrowing money - mainly from informal sources given also the limited access to agricultural credit - which increases their vulnerability. Only 14% of subsistence farmers and 17% of commercial farmers have access to formal credit, and as such mainly rely on informal groups as well as friends and family. Therefore, farmers are required to plan carefully to cater for seasonal changes as well as possible emergencies to reduce their detrimental effects. Their inability to afford additional agricultural and yield-enhancing inputs and limited access to credit might affect their ability to extend their agricultural activities and as such agricultural productivity.

[1] Economic Development and Poverty Reduction Strategy 2013 – 2018, available online at URL: http://www.minecofin.gov.rw/fileadmin/templates/documents/NDPR/EDPRS_2.pdf

Conclusions and recommendations: As shown in this report, financial inclusion among farmers in Rwanda is relatively high and varies between 86% and 91%. However, there is opportunity to further growth, especially in terms of deepening financial inclusion beyond access and moving towards a greater level of formal inclusion of those relying exclusively on informal mechanism and improving usage of formal financial products/services, which require:

- A holistic approach of poverty alleviation and development (given the link between financial inclusion and income);
- Continued innovation (to tailor financial products/services to the specific challenges and needs of farmers, i.e. seasonality and high risk factors characteristic for the sector, as well as low/irregular incomes associated with it);
- Financial education (given that a lack of consumer awareness and knowledge is often a key barrier to uptake); and
- Persistent monitoring of progress (i.e. measuring of financial inclusion levels in rural areas).

1 Introduction

Amongst other areas, rural development in Rwanda focuses on the linkages of rural growth, agriculture and rural finance (see EDPR II). As such, increasing financial inclusion amongst farmers is a consideration of significant importance in the Rwandan development agenda as it yields a number of development benefits, including accumulation of economic assets at household and enterprise level, increased household well-being through productive investments and responsible borrowing, as well as protection against major risks, and as such, decreased vulnerability.

This paper was prepared by FinMark Trust (FMT)[2] on behalf of Access to Finance Rwanda (AFR)[3]. It summarises farmers' uptake/usage of financial products and services (both formal and informal) and as such documents Rwanda's development towards greater financial inclusion and rural development[4]. Findings are based on the FinScope Survey[5] Rwanda 2016 which was initiated by the Government of Rwanda and AFR with the intention to continue measuring progress in financial inclusion. Implemented by the Centre for Economic and Social Studies (CESS) the survey was conducted under the supervision of the steering committee members (e.g. including the Ministry of Finance, Central Bank, NISR, AFR, CESS) and with technical support from FMT.

The main objectives of the FinScope Survey Rwanda 2016 were to describe the levels of financial inclusion (i.e. levels of access to financial products and services – both formal and informal) and the landscape of access (i.e. the type of products and services used by financially included individuals). As such, it aimed to identify the drivers of, and barriers to financial access, and therefore, to stimulate evidence-based dialogue that will ultimately lead to effective public and private sector interventions aimed to increase and deepen financial inclusion.

The survey is based on a nationally representative sample of the adult population in Rwanda aged 16 years and older. A total of 12 480 face-to-face interviews were conducted from November 2015 to January 2016 using Computer Assisted Personal Interviews (CAPI). The data was weighted and benchmarked to the 2013/14 Integrated Household Living Conditions Survey (EICV4) and the FinScope Rwanda 2016 survey findings were validated and approved by the NISR. Data analysis was conducted by FinMark Trust with the involvement of AFR and the steering committee.

FinScope Rwanda 2016 estimated the total adult population (16 years and older) to be almost 6 million[6] of which 86% are from households that are involved in agricultural activities (= about 5.2 million). They depend either directly or indirectly on agriculture as their main source of income, employment, and/or main source of food security. In turn, only 14% of Rwanda's adult population is not involved in agricultural activities at all.

---

2 **FinMark Trust** was established in March 2002 with initial funding from the UK's Department for International Development (DFID). More recently some other funders (UNCDF, Bill & Melinda Gates Foundation and MasterCard Foundation) have come on board to support the work of FinMark Trust. FinMark Trust is an independent trust whose purpose is 'Making financial markets work for the poor, by promoting financial inclusion and regional financial integration'. In pursuit of its goal of improving the livelihoods of the poor through the usage of financial products and services, FinMark Trust recognises the complementary role of governments (as policymakers and regulators) and the private sector (as service providers) and believes that the availability of credible financial sector information enables effective, evidence-based dialogue amongst financial sector role players, and that this will facilitate the development of effective interventions that are essential for sustainable financial market development. In order to fulfil its objectives, FinMark Trust developed the FinScope Consumer Survey.

3 **AFR** was launched in March 2010 at the request the Government of Rwanda and with support from DFID and the World Bank. The core objective of AFR is to remove systemic barriers to financial services by putting the poor at the center of its interventions.

4 For a better understanding of the country context, the financial landscape, and overall levels of financial inclusion, this paper shall be read in conjunction with the full FinScope Rwanda 2016 report which is available upon request from FinMark Trust or AFR.

5 **FinScope Consumer Survey:** FinScope is a comprehensive and nationally representative survey on financial inclusion, looking at how individuals source their income and manage their financial lives. It provides insight into attitudes and perceptions regarding financial products and services. The key objective of the FinScope Consumer Survey is to measure and profile levels of access to and use of financial services by all eligible adults (16/18 years and older), across income ranges and other demographics, and to make this information available for use by key stakeholders such as policy-makers, regulators, and financial services providers. To date, FinScope Surveys in Rwanda have been conducted in 2008, 2012 and 2016.

6 For a profile of the total adult population please refer to the FinScope Rwanda 2016 Report.

For the purpose of this report, farmers are segmented into the following groups:

1. **Subsistence farmers (30% = about 1.8 million):** those who are **head of households** and are involved in **self-sufficiency agricultural activities** (i.e. farming, fishing) in which the farmers focus on growing enough food to feed themselves and their families. The output is used for household purposes with little or no surplus for sale. They might also have other sources of income (e.g. as rural wage labourers/farm workers and/or off-farm work).

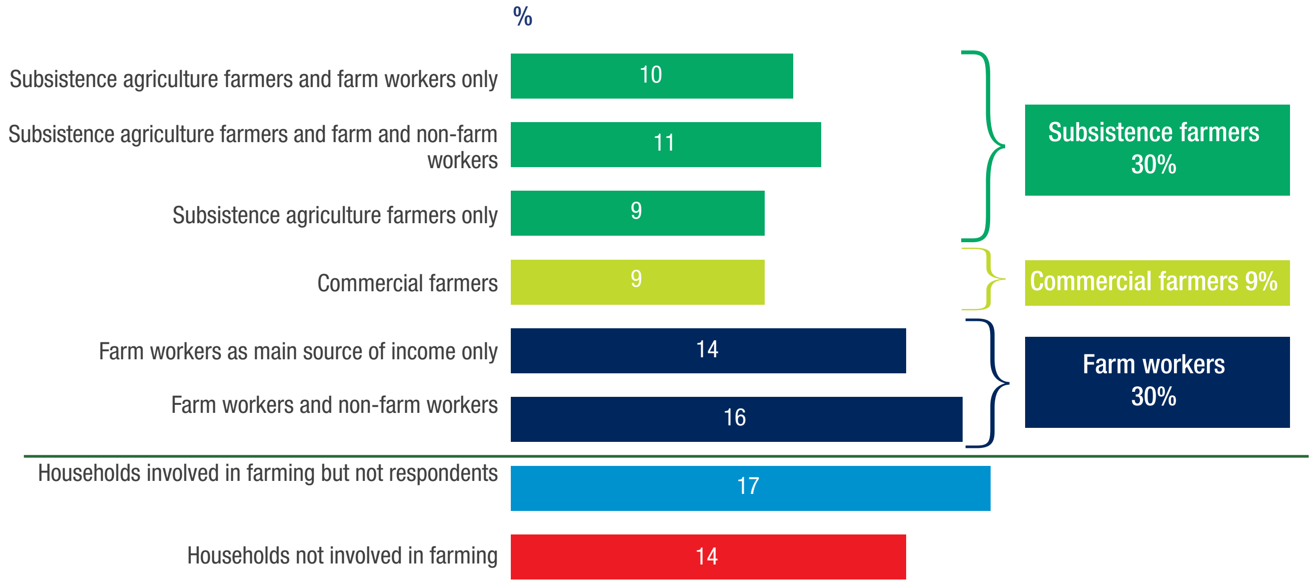
2. **Commercial farmers (9% = about 536 000):** those who perceive their agricultural activities (i.e. farming, fishing) as a commercial farming business, i.e. **farming for profit, where food is produced for sale in the market.** They either own an agricultural business or they farm mostly for the purpose of selling their produce. They might also receive an income from other sources, including off-farm work.

3. **Farm workers (30% = about 1.8 million):** those who receive an **income from agricultural activities,** including farming, fishing, **and/or rural wage labour, i.e. salary/wage from a farmer.** They might come from households that are involved in subsistence farming but they are not the head of the household/are not involved in decision making regarding agricultural inputs. Farm workers can be segmented further into (a) those who receive their main income through rural wage labour (14% of adults in Rwanda – **farm workers only**), and (b) those who also receive an income from other sources, including off-farm work (16% - **farm workers and off-farm**).

Excluded in this segmentation are:

– Those who are involved in agricultural activities but are not head of households and do not receive an income from rural wage labour, i.e. salary/wage from a farmer (17%)
– Those who are not involved in agricultural activities at all (14%)

Figure 1: Segmentation of farmers



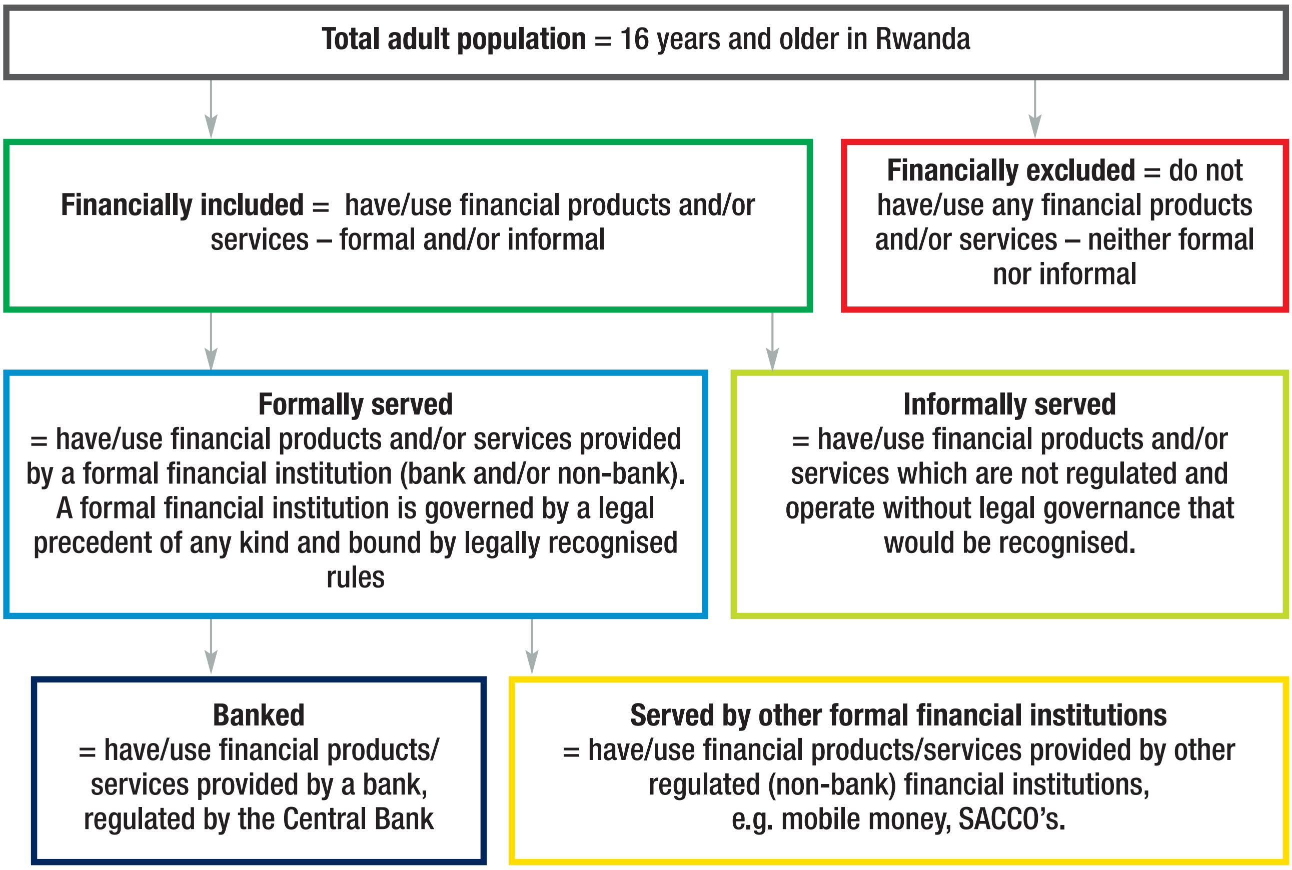
The following chapters will:

1) Introduce the profile of farmers (e.g. location, gender, age, education) according to this segmentation.

2) Summarise overall levels of financial inclusion amongst these farmers following the analytical framework illustrated below and further explore the uptake of banking, savings, credit, insurance, and remittance products/services[7].

[7] The concept of 'financial inclusion' is core to the FinScope methodology and is based on the extent to which individuals (i.e. percentage of the adult population) currently have/use financial products/services both formal and/or informal (including banking, savings and investments, borrowing and credit, insurance and risk management, remittance).

Figure 2: Analytical framework



2 Subsistence farmers

2.1 Demographic profile and characteristics

As shown in the following figures (3-6) subsistence farmers are mainly based in the rural areas (95%). Subsistence farmers here mainly male (69%), and are usually older (only 15% are 30 years of age or younger), with lower levels of education. Every third subsistence farmer (33%) has no formal education, and a further 56% only have primary education. This might affect their overall skills in bookkeeping and financial planning.

Figure 3: Location of subsistence farmers

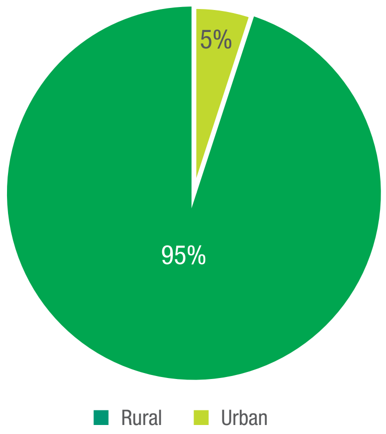


Figure 4: Gender of subsistence farmers

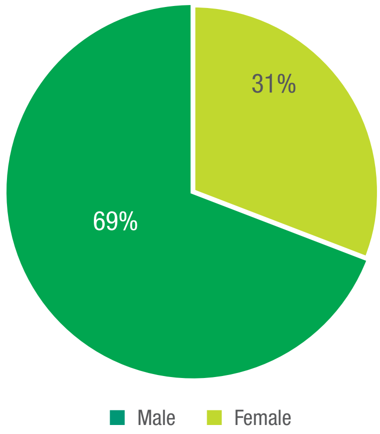


Figure 5: Age of subsistence farmers

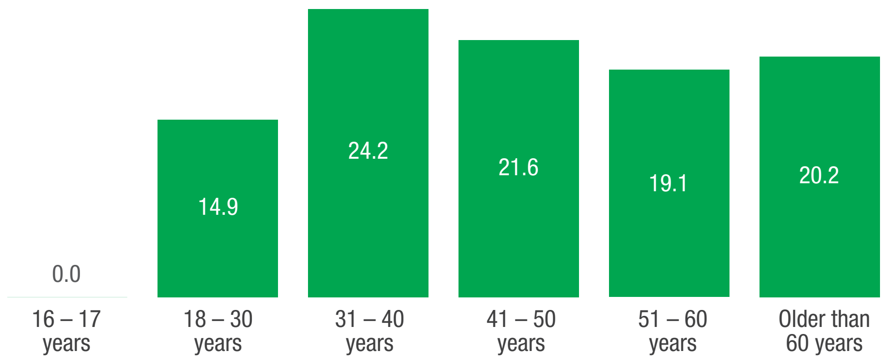
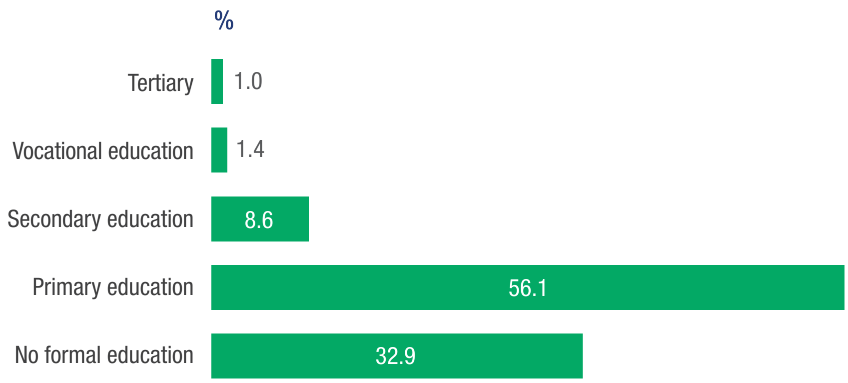
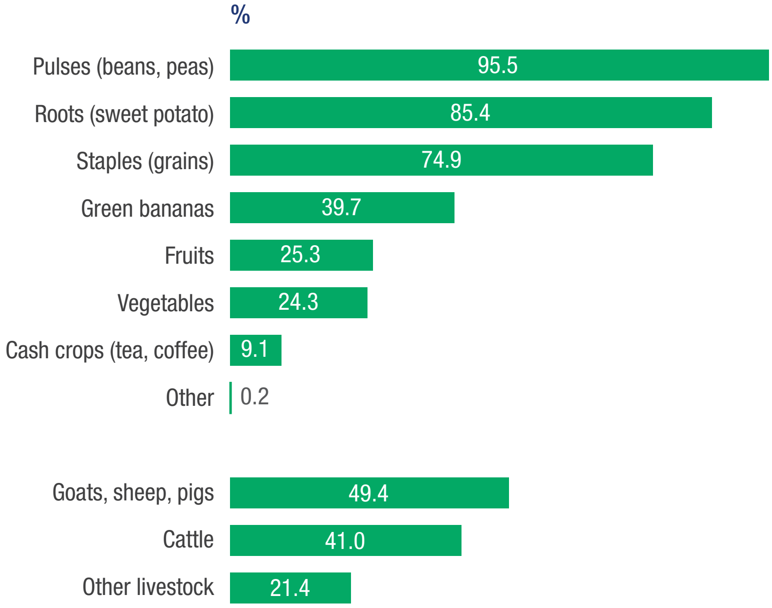


Figure 6: Level of education of subsistence farmers



Farming categories: Subsistence farmers mainly depend on pulses (96% e.g. beans, peas), roots (85% e.g. sweet potato), and other staples (75% e.g. grains) as shown in Figure 7. Almost every second subsistence farmer also has livestock, mainly goats, sheep, and/or pigs (49%), followed by cattle (41%).

Figure 7: Farming categories of subsistence farmers

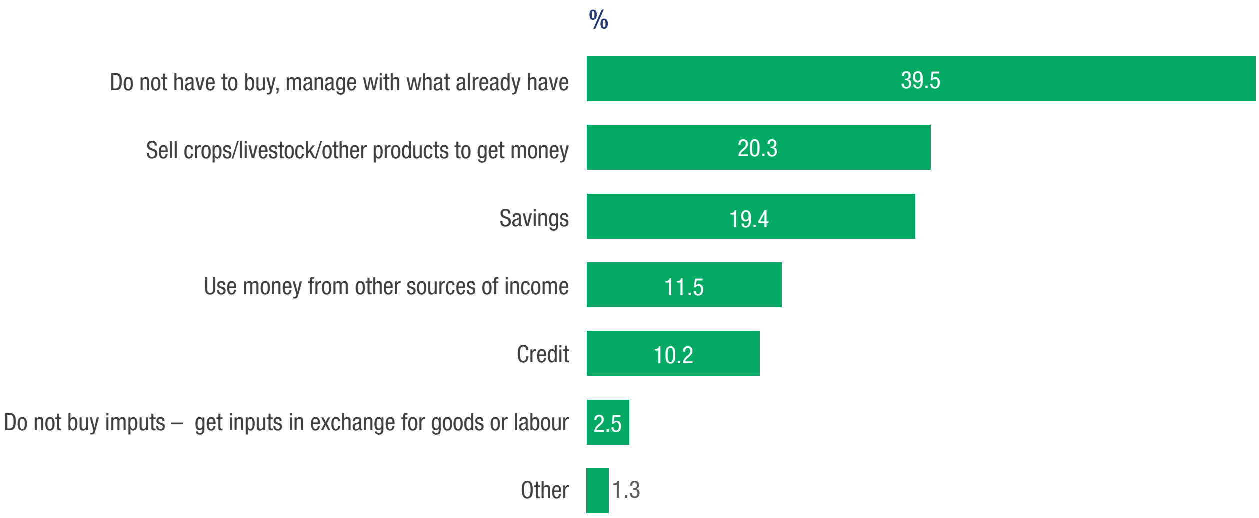


2.2 Agriculture finance for subsistence farmers

Many subsistence farmers seem to plan for the next season: 40% do not have to buy agricultural inputs because they manage with what they have already, e.g. seeds from the previous harvest, and 20% said they sell crops, livestock, and/or other produce the get the money for their agricultural activities. However, that probably also means that farming remains on a small scale as large inputs would not be affordable. While 19% use their own savings, only 10% rely on credit.

Saving and borrowing for farming activities leads to the overall savings and borrowing behaviour (see sections 2.3.3 and 2.3.4).

Figure 8: Sources of money for subsistence farming activities



Drivers for saving and borrowing money for farming activities: Subsistence farmers' agricultural savings are driven by livestock as illustrated in the figure below, as the majority of them keep seeds etc. from their own harvest for agriculture input. Agricultural credit on the contrary is driven by agricultural inputs, as well as livestock. The figure below shows that agricultural credit is also key for farming equipment.

Figure 9: Subsistence farmers - drivers for agricultural savings (of those who are saving for agriculture purposes)

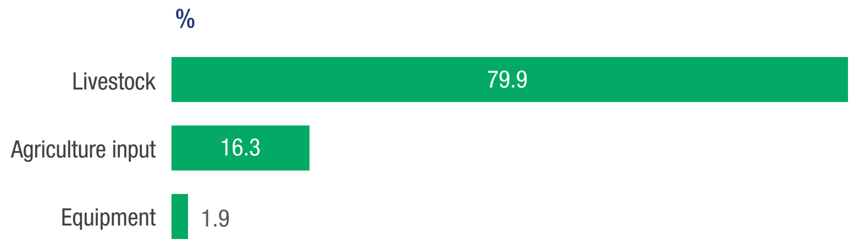
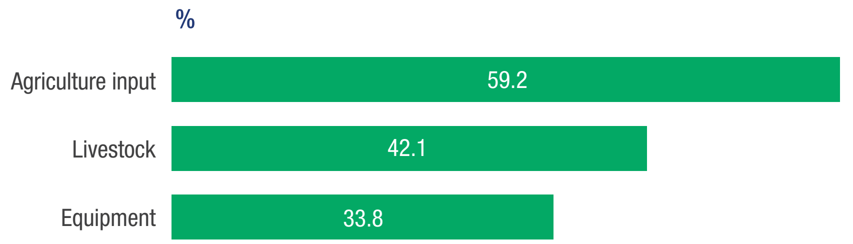


Figure 10: Subsistence farmers - drivers for agricultural credit (of those who borrow for agricultural purposes)



2.3 Level of financial inclusion

2.3.1 Overall levels of financial inclusion

The following section summarises the overall levels of financial inclusion among subsistence farmers, i.e. the uptake of financial products and/or services, including all forms of banking, savings, credit, remittances, insurance, mobile money, and informal mechanisms.

The financially included subsistence farmers include those who are:

- **Formally served:** 65% of subsistence farmers have or use products or services from financial institutions that are regulated through an Act of law (formal financial institutions), which is driven by other formal (non-bank) financial products/services (national average of 68%)

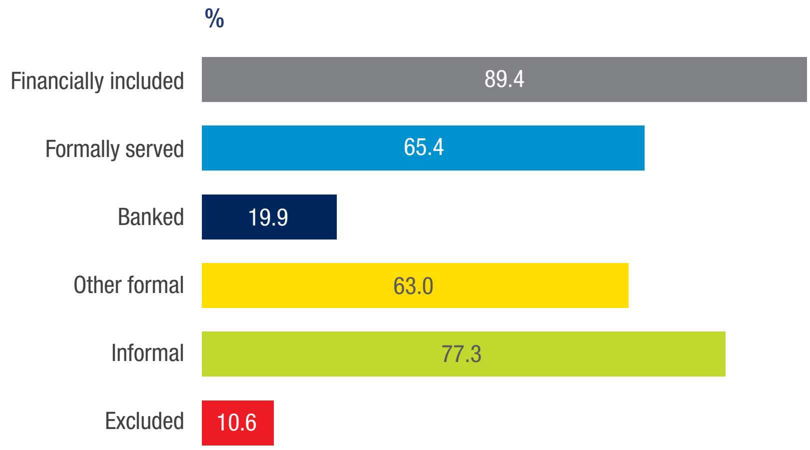
- **Informally served:** 77% have or use products or services from financial institutions that are not regulated (informal financial institutions and mechanisms) and/or use community based organisations/mechanisms to save or borrow money (national average of 71%).

The formally served subsistence farmers further includes those who are:

- **Banked:** 20% of subsistence farmers have or use products or services from licensed commercial banks that are regulated by the central bank (national average of 26%).

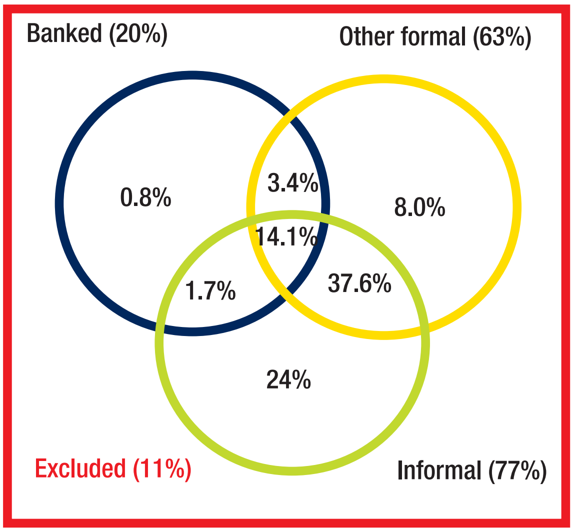
- Served by **other formal** financial institutions (non-bank): 63% have or use products or services from financial institutions that are regulated through Acts of law but which are not commercial banks (national average of 65%). That is mainly driven by the uptake of mobile money, as well as the continued increase of Umurenge SACCOs. About 41% of subsistence farmers in Rwanda are members of Umurenge SACCOs (national average 51%).

Figure 11: Subsistence farmers overview of financial products/services uptake



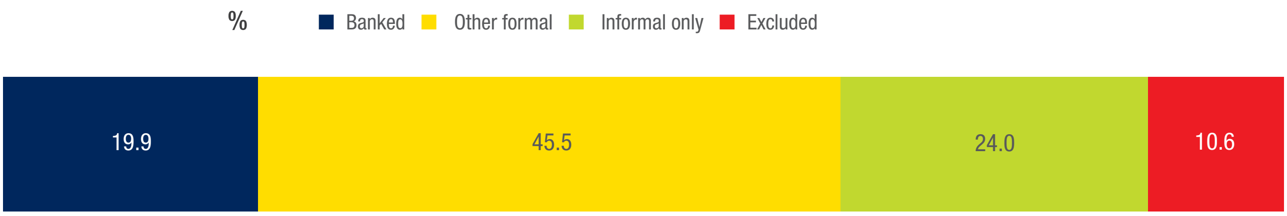
As illustrated in the figure below, there are a number of **overlaps** in the uptake of financial products and services, especially with regard to the uptake of other formal and informal mechanisms.

Figure 12: Subsistence farmers overlaps in product uptake



The **Access Strand** removes the overlaps using a hierarchical approach to depict the uptake of financial products/services. As illustrated below, 11% of subsistence farmers in Rwanda are financially excluded. Around 24% of subsistence farmers only rely on informal mechanisms to manage their financial lives. They do not use/have any formal financial products/services. 46% of subsistence farmers have/use other formal non-bank financial products/services. They do not use financial products/services offered by a commercial bank. They might, however, also use informal mechanisms to manage their financial lives. About 20% of subsistence farmers are banked. They might also have/use financial products/services offered by other formal non-bank institutions and/or informal financial mechanisms.

Figure 13: Subsistence farmers Access Strand



The following sections look at the uptake of specific product categories and financial behavior in more detail, namely banking, savings and investments, credit and borrowing, insurance and risk mitigation, as well as remittances and mobile money.

2.3.2 Banking and payments

Although overall levels of financial inclusion are relatively high in Rwanda, the FinScope survey found that subsistence farmers in Rwanda are largely unbanked. 80% of subsistence farmers do not have a bank account in their names or joint accounts and/or are using banking channels or services[8] to manage their finances. The main barriers to banking relate to insufficient or irregular income (insufficient money coming in 85%). In turn, 20% of subsistence farmers are banked, which is mainly driven by savings (37%), keeping money safe (26%) and to process salary (25%).

20% of subsistence farmers are banked

Drivers

Subsistence farmers in Rwanda have a bank account/use banking services mainly to:

- Save money (37%)
- Keep money safe (26%)
- To process income (25%)

80% of subsistence farmers are not banked
(neither direct nor indirect)

Barriers

Subsistence farmers do not have a bank account mainly due to monetary reasons (affordability):

- Insufficient money coming in (85%)
- Charges to high (8%)
- Banks are too far away (4%)

2.3.3 Savings and investments

Savings are the leading product type and one of the main drivers of financial inclusion for subsistence farmers in Rwanda. In total, 88% of subsistence farmers save mainly for agricultural activities (37%), but also to pay for living expenses when times are hard (32%), as well as other developmental purposes (18%), and emergencies (8%). Only 12% of subsistence farmers do not save, mainly because of monetary reasons. They do not have the money to save (75%) and/or do not have a job (18%) and as such no regular income. 9% never thought of saving, which might be an opportunity for financial inclusion.

88% of subsistence farmers save

Drivers

Subsistence farmers in Rwanda mainly save:

- Farming activities (37%)
- To pay for pay for living expenses when times are hard (32%)
- Other developmental purposes (18%)

12% of subsistence farmers do not save

Barriers

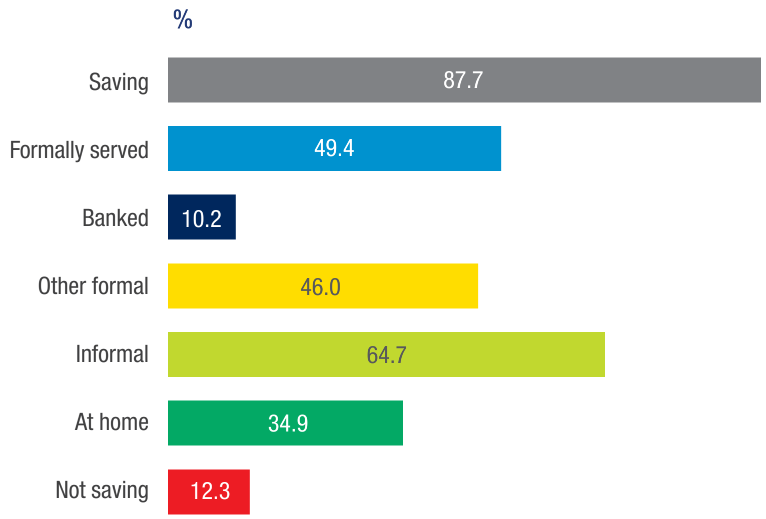
Subsistence farmers do not save mainly due to monetary reasons (affordability):

- Do not have money (75%)
- Do not have job(18%)
- Never thought of it (9%)

[8] Other banking services refer to banking services over the counter (OTC), e.g. paying school fees, receiving income and remitting through a bank without having an account in their name.

The figure below illustrated the uptake of savings products/mechanisms. As shown, saving through informal savings groups and SACCOs (other formal) is particularly popular. They are not only a viable alternative for the vast number of subsistence farmers unlikely to be served by commercial banks, they are also the catalyst for enhanced social capital, skills exchange, as well as community social and economic development.

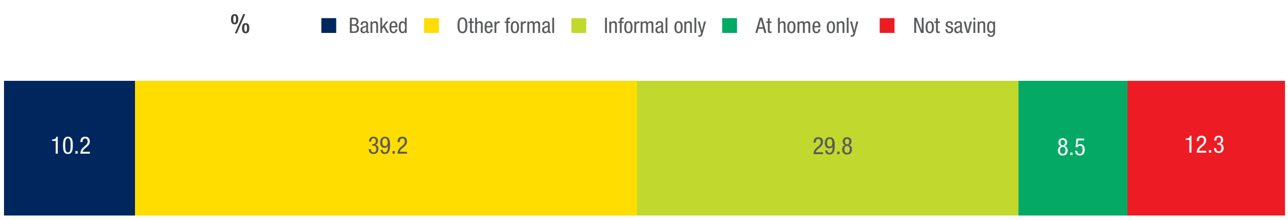
Figure 14: Subsistence farmers overview of savings products/services uptake



Savings Strand: In constructing this strand, the overlaps in savings product/services usage are removed, showing that:

- 12% of subsistence farmers do not save at all
- 9% of subsistence farmers keep all their savings at home, i.e. they do not have/use formal or informal savings products or mechanisms
- 30% of subsistence farmers rely on informal mechanisms such as savings groups (they might also save at home, but they do not have/use any formal savings products)
- 39% of subsistence farmers have/use other formal non-bank savings products (they might also have/use informal savings mechanisms and/or save at home, but they do not have/use savings products from a commercial bank)
- 10% of subsistence farmers have/use savings products from a commercial bank (they might also have/use other formal and/or informal mechanisms, and/or save at home)

Figure 15: Subsistence farmers Savings Strand



2.3.4 Credit and borrowing

Subsistence farmers are less likely to borrow than to save. In total, 74% of subsistence farmers borrow, mainly to pay for agricultural activities (37%), but also to pay for living expenses when times are hard (32%), for other developmental purposes (18%), as well as medical expenses (13%), and emergencies (8%). However, 26% of subsistence farmers do not borrow, mainly because they are worried that they would not be able to pay it back (54%). 23% said that they did not need to borrow money, and 13% did not borrow because of the lack of security/collateral.

74% of subsistence farmers borrow
(mainly from informal sources)

Drivers

Subsistence farmers in Rwanda mainly borrow:

- Farming activities (37%)
- To pay for pay for living expenses when times are hard (32%)
- Other developmental purposes (18%)
- Medical expenses (13%)
- Emergencies (8%)

26% of subsistence farmers do not borrow

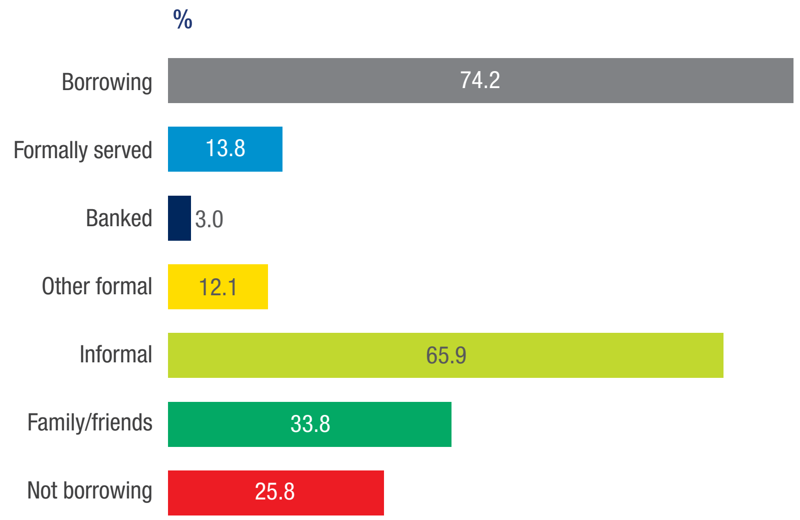
Barriers

Subsistence farmers in Rwanda do not borrow mainly because they:

- Are worried that they would not be able to pay back the money (54%)
- Did not need to borrow the money (23%)
- Do not have security (13%)

The figure below summarises the uptake of credit products/services. The percentage of subsistence farmers taking a loan from a commercial bank is only 3%. Subsistence farmers also lag behind in taking up credit from other formal (non-bank) institutions (12%). As shown below, the majority of subsistence farmers rely on borrowing from informal groups (66%) as well as family/friends (34%). The importance of informal groups to enhance financial inclusion among subsistence farmers cannot be stressed enough especially in remote areas.

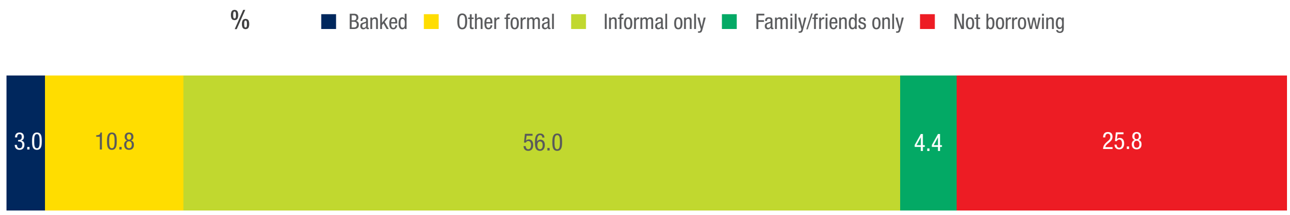
Figure 16: Subsistence farmers overview of credit products/services uptake



Credit Strand: In constructing this strand, the overlaps in credit product/services usage are removed, showing that:

- 26% of subsistence farmers do not borrow at all
- 4% of subsistence farmers only rely on friends and/or family, i.e. they do not have/use formal or informal credit products or mechanisms
- 56% of subsistence farmers rely on informal mechanisms such as savings groups and money lenders (they might also borrow from family/friends, but they do not have/use any formal credit products)
- 11% of subsistence farmers have/use other formal non-bank credit products (they might borrow from informal sources and/or borrow from friends, but they do not have/use credit products from a commercial bank)
- 3% of subsistence farmers have/use credit products from a commercial bank (they might also have/use other formal and/or informal mechanisms, and/or borrow from friends/family)

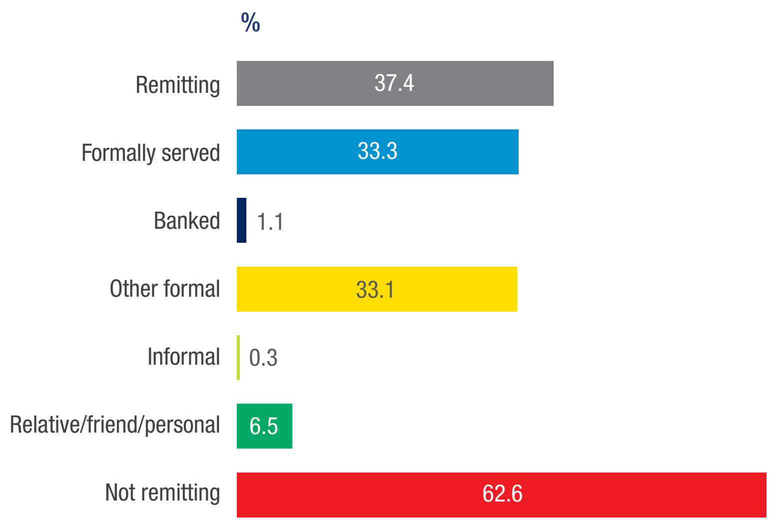
Figure 17: Subsistence farmers Credit Strand



2.3.5 Remittances

About 37% of subsistence farmers in Rwanda either sent and/or received money from people living in a different place (within the country and/or outside Rwanda). The most common mechanism used to transfer money is through formal channels. Around 7% of subsistence farmers still send or receive money in cash through a relative/friend or deliver it in person. The figure below summarises the uptake by remittances channels. Only 1% of subsistence farmers either sent and/or received money using commercial banks.

Figure 18: Subsistence farmers overview of remittances products/services uptake



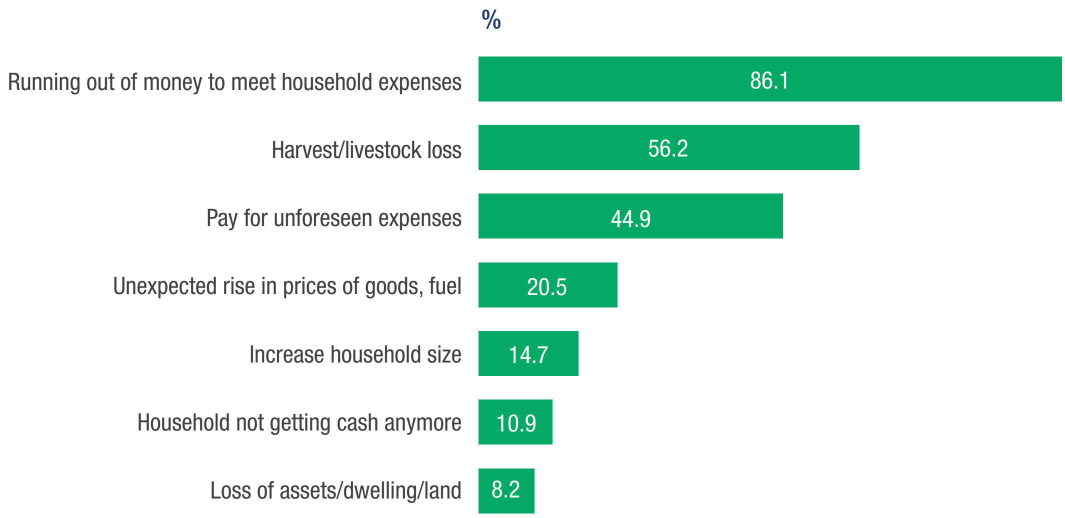
Remittances Strand: The Remittances Strand shows that there are hardly any overlaps in the uptake of remittance channels.

Figure 19: Subsistence farmers Remittances Strand

2.3.6 Insurance and risk mitigation

To pay for livings expenses when times are hard is an important driver for both savings and borrowing. As such it is not surprising that running out of money to meet household expenses in the past 6 months prior to the survey is reported as the main financial risk experienced by 86% of subsistence farmers, which is also related to low/irregular income of subsistence farmers. Many subsistence farmers dealt with it by cutting down expenses (34%) and/or borrowed money (33%), which increases their vulnerability. Coping strategies for harvest and livestock losses (experienced by 56% of subsistence farmers) mainly include cutting down expenses (31%), followed by borrowing money (8%) and the use of savings (8%). Only 0.1% claimed an insurance policy.

Figure 20: Subsistence farmers' financial risks experienced during the past 6 months



About 77% of subsistence farmers have Mutuelle de Sante. However, other risk cover is low in Rwanda. In total, only 6% of subsistence farmers are covered by an insurance product which is mainly driven by medical insurance (67%) and Rwanda's Social Security Board (50%). Only 3% are covered by agricultural insurance. Given the high vulnerability of subsistence farmers, especially with regard to harvest/livestock loss, affordable and accessible crop and livestock insurance poses a real opportunity to financial inclusion. In turn, 94% of subsistence farmers do not have an insurance/pension product, mainly because they cannot afford it (63%), followed by a lack of consumer awareness/knowledge. 17% have never heard about it and 15% do not know how it works.

6% of subsistence farmers have insurance

Drivers

Product uptake is driven by:

- Medical insurance (67%)
- Rwanda's Social Security Board (50%)
- Agriculture (3%)

94% of subsistence farmers do not have insurance

Barriers

Main barriers to the uptake of insurance relate to:

- Cannot afford (63%)
- Has never heard about it (17%)
- Does not know how insurance works (15%)

2.3.7 Mobile money

Cellphone access and ownership continue to increase in Rwanda with 82% of subsistence farmers owning/having access to a cellphone. As such, the uptake of mobile money has also increased over the past years with 31% of subsistence farmers having/using a mobile money account. The uptake of mobile money is mainly driven by remittances (60%), followed by savings (13%). 19% said they have a mobile money account because they saw other people using it/advertisement. In turn, 69% of subsistence farmers do not use mobile money, mainly because of product knowledge (59%). 26% said they do not know how to use it.

31% of subsistence farmers use mobile money

Drivers

Product uptake is driven by:

- Remittances (60%)
- Saw other people using it/advertisement (19%)
- Savings or to store money (13%)

69% of subsistence farmers do not use mobile money

Barriers

Main barriers to the uptake of mobile money relate to lack of consumer awareness and knowledge, e.g.

- Lack of product knowledge (59%)
- Do not know how to use it (26%)
- Do not need it (9%)

3 Commercial farmers

3.1 Demographic profile and characteristics

About 9% (= 536 000) of Rwanda's adult population can be classified as commercial farmers. They perceive their agricultural activities (i.e. farming, fishing) as a commercial farming business, i.e. farming for profit, where food is produced for sale in the market. They either own an agricultural business or they farm mostly for the purpose of selling their produce. They might also receive an income from other sources, including off-farm work.

As shown in the Figures 21 - 24 commercial farmers are mainly based in the rural areas (95%). Commercial farmers are mainly female (56%), and are relatively young (32% are 30 years of age or younger), with lower levels of education. Every third commercial farmer (23%) has no formal education, and a further 61% have only primary education, which might affect their overall skills in bookkeeping and financial planning.

Figure 21: Location of commercial farmers

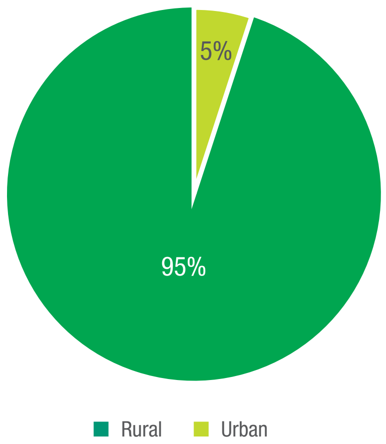


Figure 22: Gender of commercial farmers

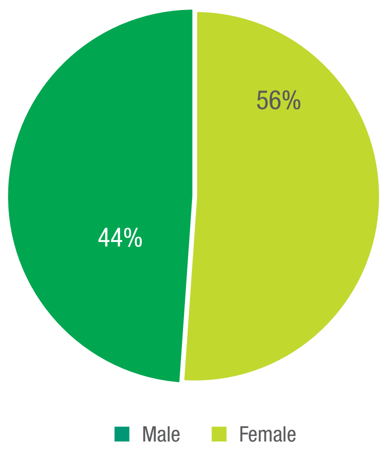


Figure 23: Age of commercial farmers

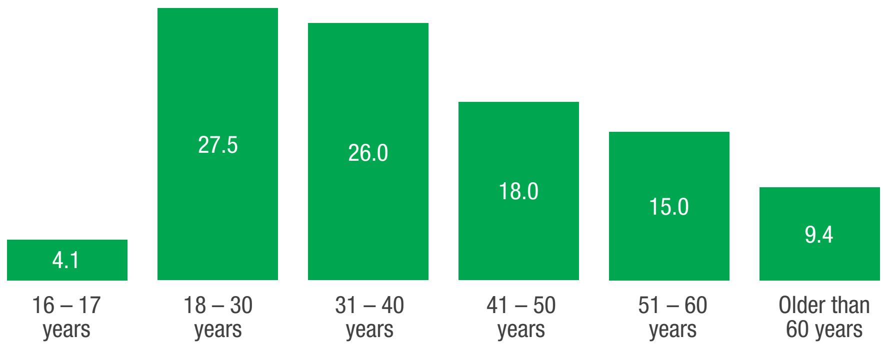
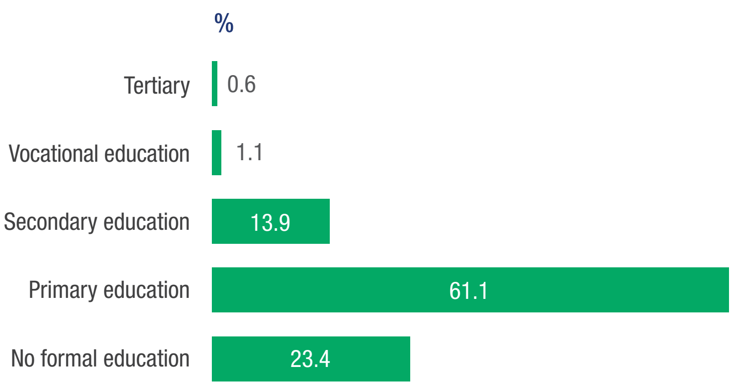


Figure 24: Level of education of commercial farmers



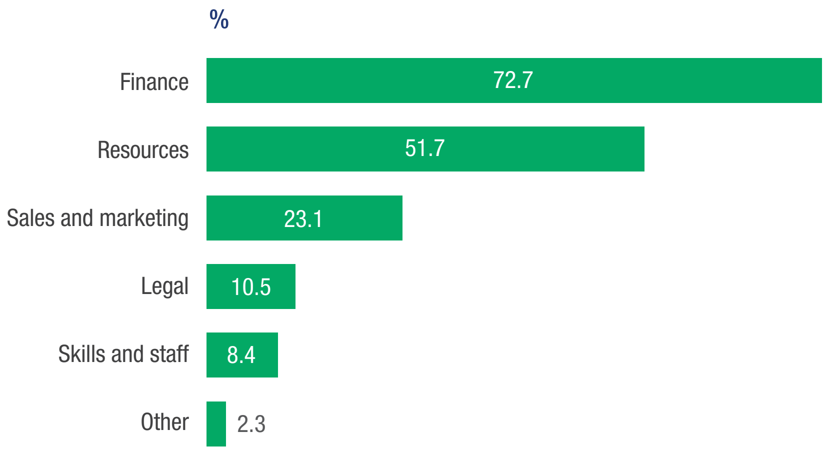
Size and scope of farming businesses: Sizing the farming businesses by number of employees shows that most commercial farmers are in fact individual entrepreneurs or only employ a few people, demonstrating the importance of entrepreneurship and micro businesses in Rwanda. As illustrated below, 69% of commercial farmers do not have any employees, while the remaining 31% of commercial farmers actually generate employment (for a total of about 527 100 people). The large majority, however, are micro business (22%), employing only 1 to 3 people, while small businesses (employing 4 to 30 employees) account for 6%. Only 3% of agricultural businesses are medium-size (employing more than 30 people)[9].

Table 1: Size of commercial farming businesses

Destination	Number of commercial farmers	Southern Province
Number of employees	374 866	69.1
Micro (1-3 employees)	117 633	21.7
Small (4-30 employees)	33 088	6.1
Medium (more than 30 employees)	15 896	2.9

Challenges facing the business: Commercial farmers face a range of challenges in their agricultural businesses as illustrated in the figure below with finance being the most common as mentioned by 73% of commercial farmers (who said their business faces challenges). Finance includes a number of constraints, including sourcing money, opening a bank account, cash flow challenges, as well as being owed money/debtors, and financial records. Despite the relatively low levels of education among farmers, lacking skills is not perceived as a major problem.

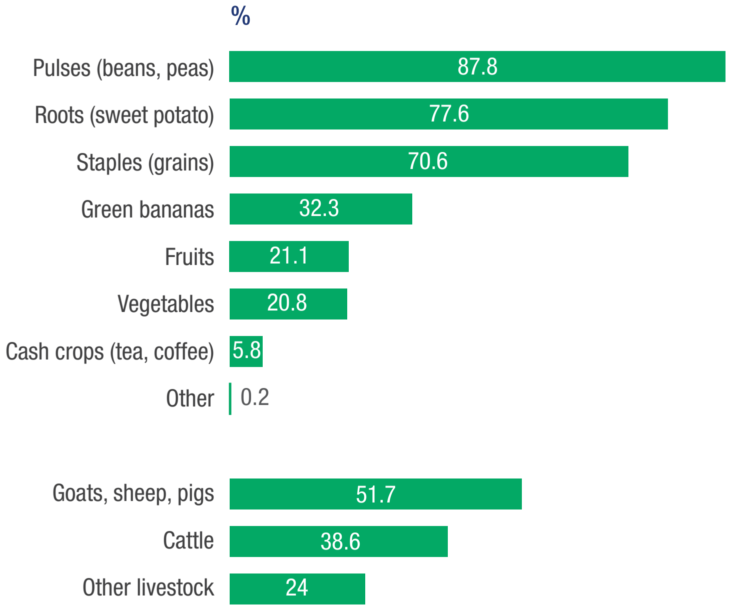
Figure 25: Challenges facing commercial farming businesses (of those who face challenges)



9 Note: It is recommended to conduct a FinScope MSME survey in Rwanda to assess these agricultural businesses in more detail.

Farming categories: Commercial farmers mainly depend on pulses (88%, e.g. beans, peas), roots (78%, e.g. sweet potato), and other staples (71%, e.g. grains) as shown in the figure below. Cultivated crops such as beans and peas, as well as grains offer huge opportunities for commercial farmers along the value chain, e.g. through processing and canning. However, opportunities in the processing and canning industry require sector knowledge, key financials, and capital requirements associated with this opportunity. Every second commercial farmer also has livestock, mainly goats, sheep, and/or pigs (52%), followed by cattle (39%).

Figure 26: Farming categories of commercial farmers

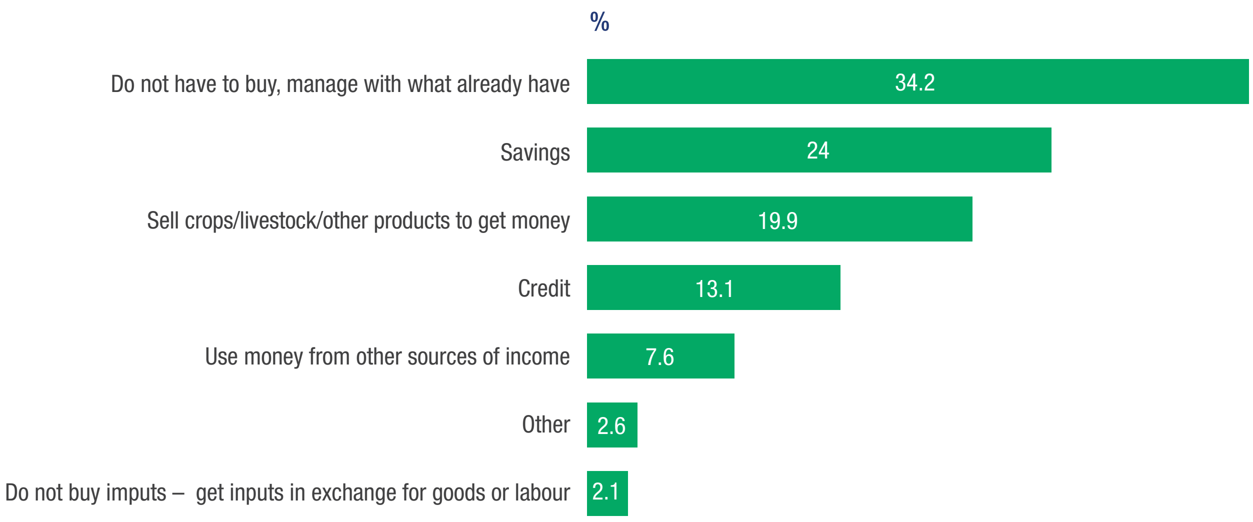


3.2 Agriculture finance for commercial farmers

This section discusses the different aspects about the agriculture finance for subsistence farmers. This section looks into the need for investing in agriculture as essential is increasing due to a rising population, regional politics and changing dietary preferences of the growing middle class in emerging markets toward higher value foods (e.g. dairy, meats, fish, fruits, vegetables, etc.). According to GIEW Rwanda brief, food security is deteriorating in some eastern districts as stocks have been depleted earlier than usual following the below average 2016A production, and households rely more on markets to meet their food needs[10].

The figure below shows that many commercial farmers in Rwanda seem to plan for the next season: 34% do not have to buy agricultural inputs because they manage with what they have already, e.g. seeds from the previous harvest, and 20% said they sell crops, livestock, and/or other produce for which they get the money for their agricultural activities. While 24% use their own savings, and only 13% rely on credit. Lack of agriculture, specifically access to credit for agricultural activities among commercial farmers constrains commercial farming growth.

Figure 27: Sources of money for commercial farming activities



10 http://www.fao.org/giews/countrybrief/country.jsp?code=RWA

Drivers for saving and borrowing money for farming activities: Commercial farmers mainly save to buy livestock (70%). In turn, 31% borrowed money to pay for livestock. As for equipment, it seems to be the other way around. More commercial farmers borrow money to pay for equipment (18%) rather than save for it (5%) as illustrated below.

Figure 28: Commercial farmers - drivers for agricultural savings (of those who are saving for agriculture purposes)

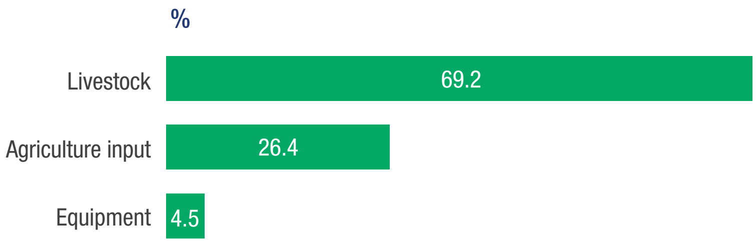
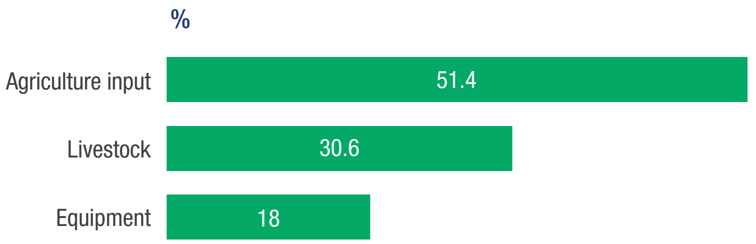


Figure 29: Commercial farmers - drivers for agricultural credit (of those who borrow for agricultural purposes)



3.3 Level of financial inclusion

3.3.1 Overall levels of financial inclusion

The following section summarises the overall levels of financial inclusion among commercial farmers, i.e. the uptake of financial products and/or services, including all forms of banking, savings, credit, remittances, insurance, mobile money, and informal mechanisms.

The financially included subsistence farmers include those who are:

- **Formally served:** 66% of commercial farmers have or use products or services from financial institutions that are regulated through an Act of law (formal financial institutions), which is driven by other formal (non-bank) financial products/services (national average of 68%).

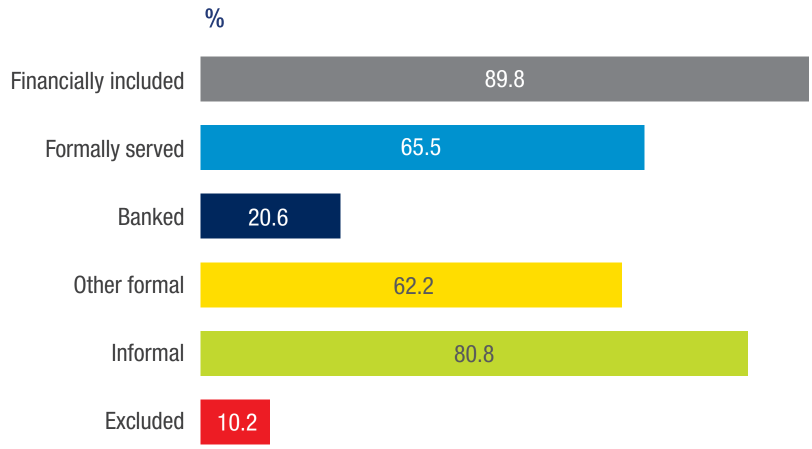
- **Informally served:** 81% have or use products or services from financial institutions that are not regulated (informal financial institutions and mechanisms) and/or use community based organisations/mechanisms to save or borrow money (national average of 71%).

The formally served subsistence farmers further includes those who are:

- **Banked:** 21% of commercial farmers have or use products or services from licensed commercial banks that are regulated by the central bank (national average of 26%).

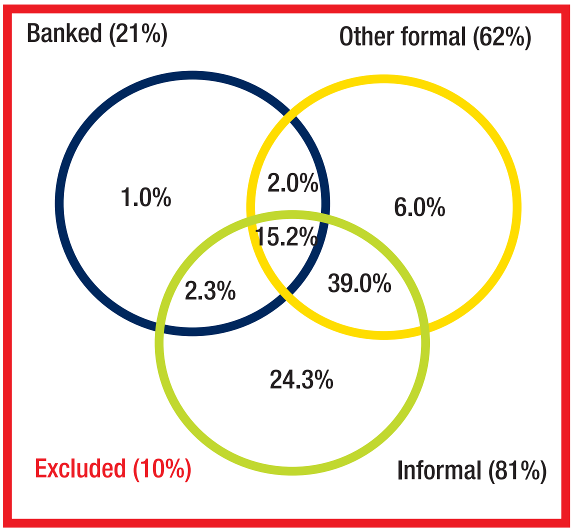
- Served by **other formal** financial institutions (non-bank): 62% have or use products or services from financial institutions that are regulated through Acts of law but which are not commercial banks (national average of 65%). That is mainly driven by the uptake of mobile money, as well as the continued increase of Umurenge SACCOs. About 37% of commercial farmers in Rwanda are members of Umurenge SACCOs (national average of 51%).

Figure 30: Commercial farmers overview of financial products/services uptake



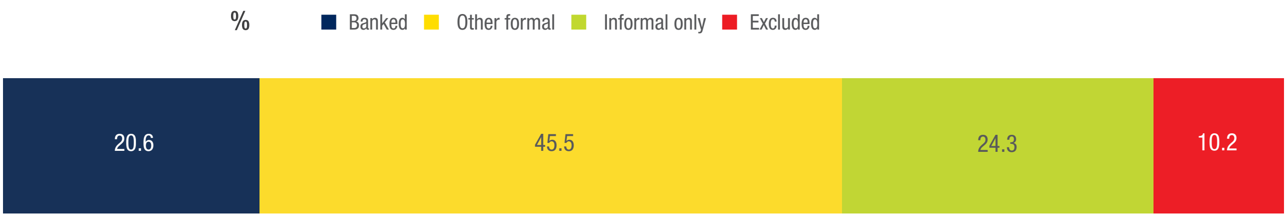
As illustrated in the figure below, there are a number of **overlaps** in the uptake of financial products and services, especially with regard to the uptake of other formal and informal mechanisms.

Figure 31: Commercial farmers overlaps in product uptake



The **Access Strand** removes the overlaps using a hierarchical approach to depict the uptake of financial products/services. As illustrated below, 10% of commercial farmers in Rwanda are financially excluded. Around 24% of commercial farmers only rely on informal mechanisms to manage their financial lives. They do not use/have any formal financial products/services. 46% of commercial farmers have/use other formal non-bank financial products/services. They do not use financial products/services offered by a commercial bank. They might, however, also use informal mechanisms to manage their financial lives. About 21% of commercial farmers are banked. They might also have/use financial products/services offered by other formal non-bank institutions and/or informal financial mechanisms. tions and/or informal financial mechanisms.

Figure 32: Commercial farmers Access Strand



The following sections look at the uptake of specific product categories and financial behavior in more detail, namely banking, savings and investments, credit and borrowing, insurance and risk mitigation, as well as remittances and mobile money.

3.3.2 Banking and payments

Although overall levels of financial inclusion are relatively high in Rwanda, the FinScope survey found that commercial farmers in Rwanda are largely unbanked. About 79% of commercial farmers do not have a bank account in their name or joint accounts and/or are using banking channels or services[11] to manage their finances. The main barriers to banking relate to insufficient or irregular income (81%). In turn, 21% of commercial farmers are banked, which is mainly driven by the desire to save money (29%), to keep money safe (36%), and/or to get a bank loan (17%). It is interesting to note that although 17% commercial farmers that opened a bank account were hoping to get credit, only 3% actually received a loan from the bank.

21% of commercial farmers are banked

Drivers

Commercial farmers in Rwanda have a bank account/use banking services mainly to:

- Save money (29%)
- Keep money safe (36%)
- To get credit/loan (17%)

79% of commercial farmers are not banked
(neither direct nor indirect)

Barriers

Commercial farmers do not have a bank account mainly due to monetary reasons (affordability):

- Insufficient money coming in (81%)
- Charges to high (6%)
- Banks are too far away (6%)

3.3.3 Savings and investments

Savings are the leading product type and one of the main drivers of financial inclusion for commercial farmers in Rwanda. In total, 85% of commercial farmers save mainly to pay for living expenses when times are hard (75%). 31% save for farming activities, and only 8% save for emergencies. In turn, only 15% of commercial farmers do not save, mainly because of monetary reasons; 68% said that they do not have money to save.

85% of commercial farmers save

Drivers

Commercial farmers in Rwanda mainly save:

- To pay for pay for living expenses when times are hard (75%)
- Farming activities (30.8%)
- Other emergencies (8.3%)

15% of commercial farmers do not save

Barriers

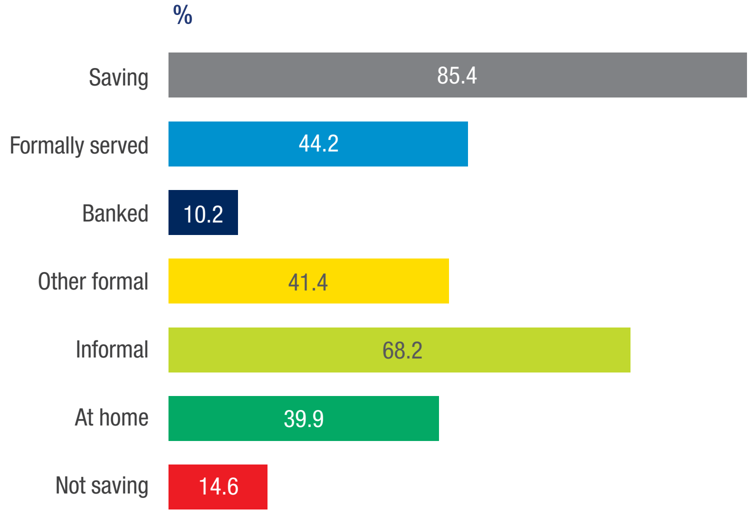
Commercial farmers do not save mainly due to monetary reasons (affordability):

- Do not have money (68%)
- Do not have job(13%)
- It is too expensive (11%)

[11] Other banking services refer to banking services over the counter (OTC), e.g. paying school fees, receiving income and remitting through a bank without having an account in their name.

The figure below illustrated the uptake of savings products/mechanisms. As shown, saving through informal savings groups (68%) and SACCOs (other formal 41%) is particularly popular. They are not only a viable alternative for the vast number of commercial farmers unlikely to be served by commercial banks, they are also the catalyst for enhanced social capital, skills exchange, as well as community social and economic development. 40% of commercial farmers also save at home.

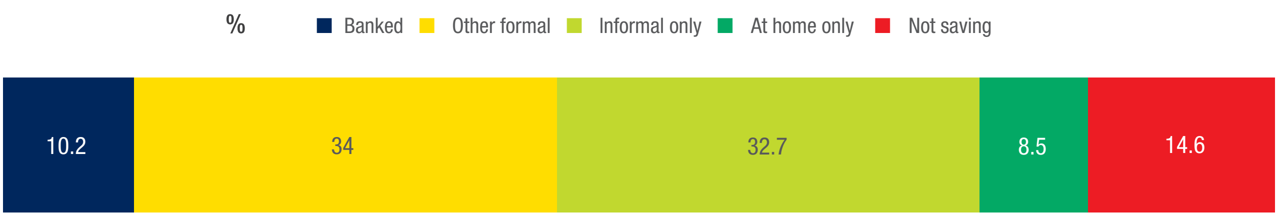
Figure 33: Commercial farmers overview of savings products/services uptake



Savings Strand: In constructing this strand, the overlaps in savings product/services usage are removed, showing that:

- 15% of commercial farmers do not save at all
- 9% of commercial farmers keep all their savings at home, i.e. they do not have/use formal or informal savings products or mechanisms
- 33% of commercial farmers rely on informal mechanisms such as savings groups (they might also save at home, but they do not have/use any formal savings products)
- 34% of commercial farmers have/use other formal non-bank savings products (they might also have/use informal savings mechanisms and/or save at home, but they do not have/use savings products from a commercial bank)
- 10% of commercial farmers have/use savings products from a commercial bank (they might also have/use other formal and/or informal mechanisms, and/or save at home)

Figure 34: Commercial farmers Savings Strand



3.3.4 Credit and borrowing

Commercial farmers are less likely to borrow than to save. In total, 78% of commercial farmers borrow, mainly for farming activities (34%) as illustrated in the figure below. Further 27% of commercial farmers borrowed money for other developmental reasons (e.g. business at 13%, as well as land, building and education at 14%). In turn, 22% of commercial farmers do not borrow, mainly because they are worries they would not be able to pay it back (54%).

About 5000 commercial farmers were refused a loan by a bank or SACCO or MFI in the last 6 months prior to the FinScope survey mainly because they did not have down payment or did not have security or collateral. Another third that was refused a loan by these formal financial institutions were not told the reasons for refusal.

78% of commercial farmers borrow
(mainly from informal sources)

Drivers

Commercial farmers in Rwanda mainly borrow:

- Farming activities (34%)
- To pay for pay for living expenses when times are hard (28%)
- For business (13%)
- Other developmental purposes (18%)

22% of commercial farmers do not borrow

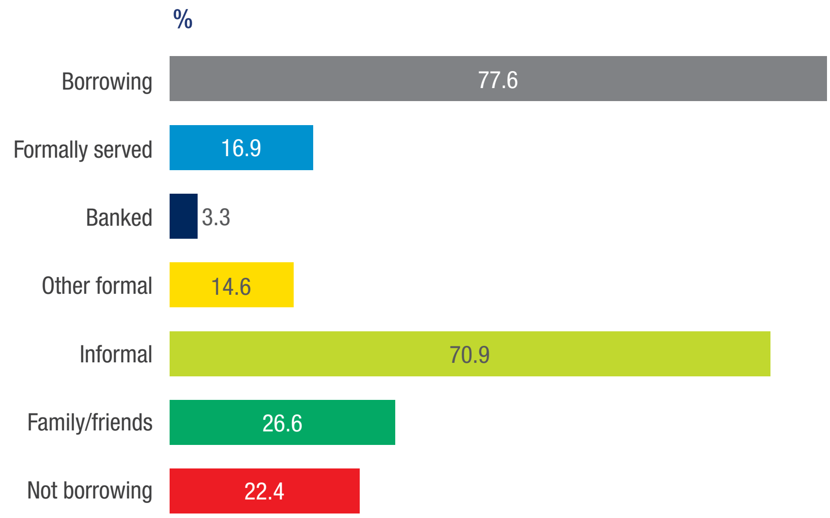
Barriers

Commercial farmers in Rwanda do not borrow mainly because they:

- Are worried that they would not be able to pay back the money (54%)
- Did not need to borrow the money (29%)
- Do not believe in borrowing money (6%)

The figure below summarises the uptake of credit products/services. The percentage of commercial farmers taking a loan from a commercial bank is only 3%. Commercial farmers also lag behind in taking up credit from other formal (non-bank) institutions (15%). As shown below, the majority of commercial farmers rely on borrowing from informal groups (71%). The importance of informal groups to enhance financial inclusion among commercial farmers cannot be stressed enough especially in remote areas. 27% rely on family/friends.

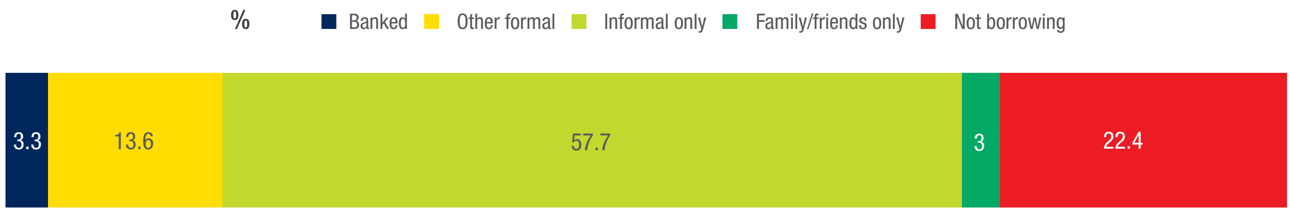
Figure 35: Commercial farmers overview of credit products/services uptake



Credit Strand: In constructing this strand, the overlaps in credit product/services usage are removed, showing that:

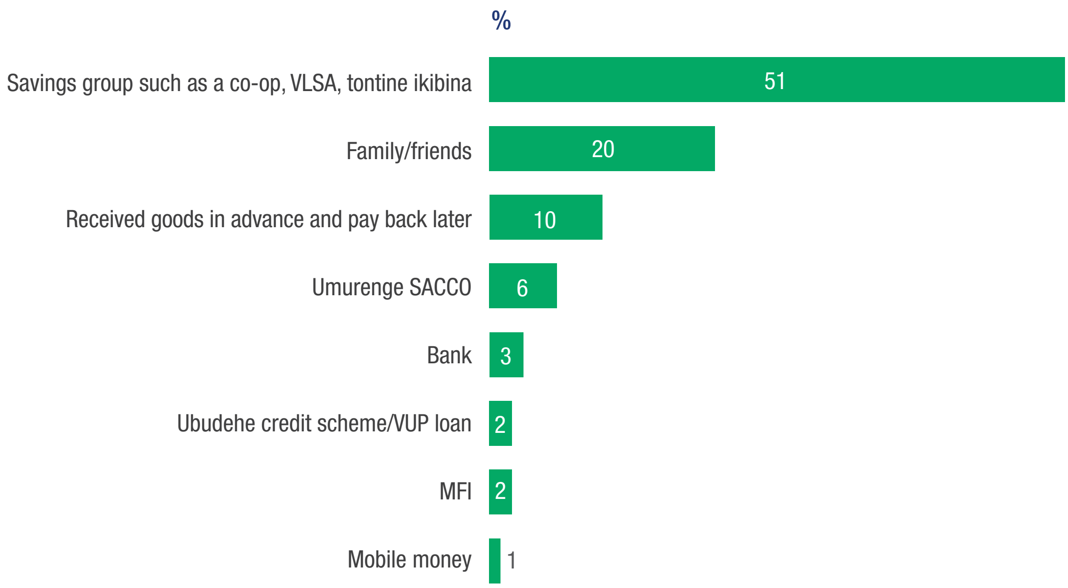
- 22% of commercial farmers do not borrow at all
- 3% of commercial farmers only rely on friends and/or family, i.e. they do not have/use formal or informal credit products or mechanisms
- 58% of commercial farmers rely on informal mechanisms such as savings groups and money lenders (they might also borrow from family/friends, but they do not have/use any formal credit products)
- 14% of commercial farmers have/use other formal non-bank credit products (they might borrow from informal sources and/or borrow from friends, but they do not have/use credit products from a commercial bank)
- 3% of commercial farmers have/use credit products from a commercial bank (they might also have/use other formal and/or informal mechanisms, and/or borrow from friends/family)

Figure 36: Commercial farmers Credit Strand



Credit and borrowing sources: As illustrated above, commercial farmers are more likely to obtain credit from informal mechanisms (51% savings groups and 20% from family and friends) than from formal financial services institutions (Umurenge SACCO 6% and banks 3%).

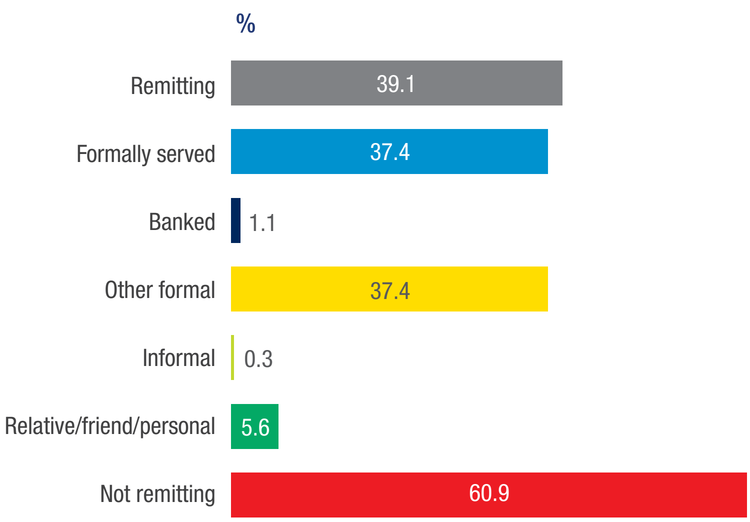
Figure 37: Sources of credit



3.3.5 Remittances

Around 39% of commercial farmers in Rwanda either sent and/or received money from people living in a different place (within the country and/or outside Rwanda). The most common mechanism used to transfer money is through formal channels (i.e. mobile money). Around 6% of commercial farmers still send or receive money in cash through a relative/friend or deliver it in person. The figure below summarises the uptake by remittance channels.

Figure 38: Commercial farmers overview of remittances products/services uptake



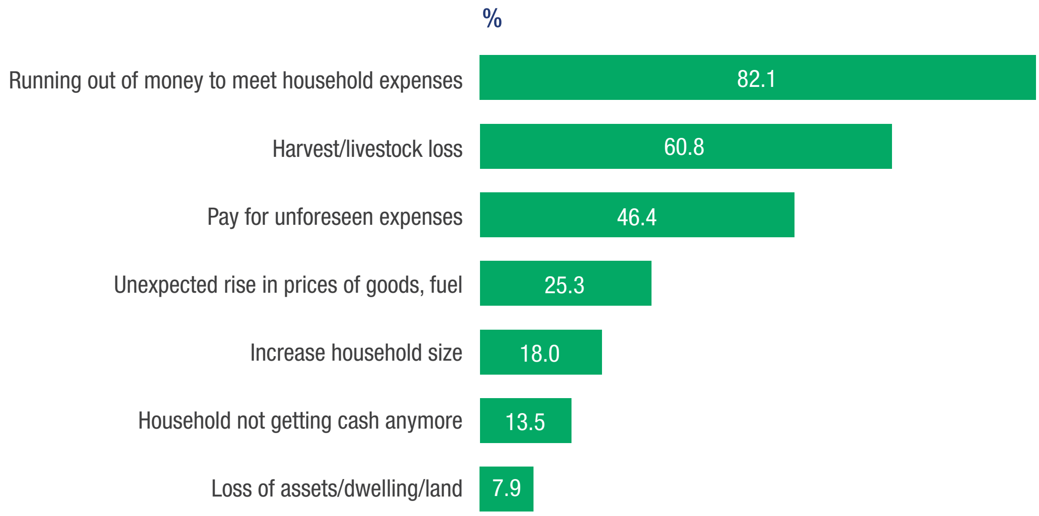
Remittances Strand: The Remittances Strand shows that there are hardly any overlaps in the uptake of remittance channels.

Figure 39: Commercial farmers Remittances Strand

3.3.6 Insurance and risk mitigation

To pay for livings expenses when times are hard is an important driver for both savings and borrowing. As such it is not surprising that running out of money to meet household expenses is reported as the main financial risk experienced by 82% of commercial farmers in the past 6 months prior to the survey, which is also relates seasonal fluctuations. Many commercial farmers rely on credit to deal with it (37% borrow money when they could not pay for household expenses) and/or the cut down expenses (31%), which increases their vulnerability. Coping strategies for harvest and livestock losses (experienced by 61% of commercial farmers) mainly include cutting down expenses (39%), followed by the use of savings (22%), and credit (19%). Only 0.2% claimed an insurance policy.

Figure 40: Commercial farmers' financial risks experienced during the past 6 months



Four in five commercial farmers (80%) are covered by Mutuelle de Sante. Other risk cover, however, risk cover is low in Rwanda. In total, only 9% of commercial farmers are covered by an insurance product which is mainly driven by medical insurance (38%) and Rwanda's Social Security Board (21%). In turn, 91% of commercial farmers do not have an insurance/pension product, mainly because of a lack of consumer awareness/knowledge. 34% said that they never heard of it, and 28% said that they do not know how it works.

9% of commercial farmers have insurance

Drivers

Product uptake is driven by:

- Medical insurance (38%)
- Rwanda's Social Security Board (21%)
- Life insurance (19%)
- Third party (13%)
- Agriculture (9%)

91% of commercial farmers do not have insurance

Barriers

Main barriers to the uptake of insurance relate to:

- Has never heard about it (34%)
- Does not know how insurance works (28%)
- Cannot afford (13%)
- Does not know where to get it (10%)

3.3.7 Mobile money

Cellphone access and ownership continue to increase in Rwanda with 80% of commercial farmers owning/having access to a cellphone. As such, the uptake of mobile money has also increased over the past years with 36% of commercial farmers having/using a mobile money account. Product uptake is mainly driven by remittance (68%). In turn, 64% of commercial farmers do not have a mobile money account which poses a real opportunity for financial inclusion especially in remote areas. Main barriers to product uptake refer to a lack of consumer awareness/knowledge. 54% do not know about it, and 23% said they do not know how to use it.

36% of commercial farmers use mobile money

Drivers

Product uptake is driven by:

- Remittances (68%)
- Saw other people using it/advertisement (15%)
- Savings or to store money (12%)

64% of commercial farmers do not use mobile money

Barriers

Main barriers to the uptake of mobile money relate to lack of consumer awareness and knowledge, e.g.

- Lack of product knowledge (54%)
- Do not know how to use it (23%)
- Do not need it (10%)

4 Farm workers

4.1 Demographic profile and characteristics

About 30% (= 536 000) of Rwanda's adult population can be classified as farm workers. They receive an income from agricultural activities, including farming, fishing, and/or rural wage labour, i.e. salary/wage from a farmer. They might come from households that are involved in subsistence farming but they are not the head of the household/are not involved in decision making regarding agricultural inputs. Farm workers can be segmented further into (1) those who receive their main income through rural wage labour (14% of adults in Rwanda – farm workers only), and (2) those who also receive an income from other sources, including off-farm work (16% - farm workers and off-farm).

As shown in the following figures farm workers are mainly based in the rural areas: 96% of farm workers who only receive an income from rural wage labour reside in rural areas compared to 92% of farm workers with additional sources of income. They are mainly female (76% and 75% respectively), and are rather young (46% are 30 years of age or younger, and 48% respectively), with relatively lower levels of education. 18% of farm workers who only receive an income from rural wage labour have no formal education compared to 17% of farm workers with additional sources of income, and a further 46% and 48% respectively have only primary education, which might affect their overall skills in bookkeeping and financial planning.

Figure 41: Location of farm workers

Figure 42: Gender of farm workers

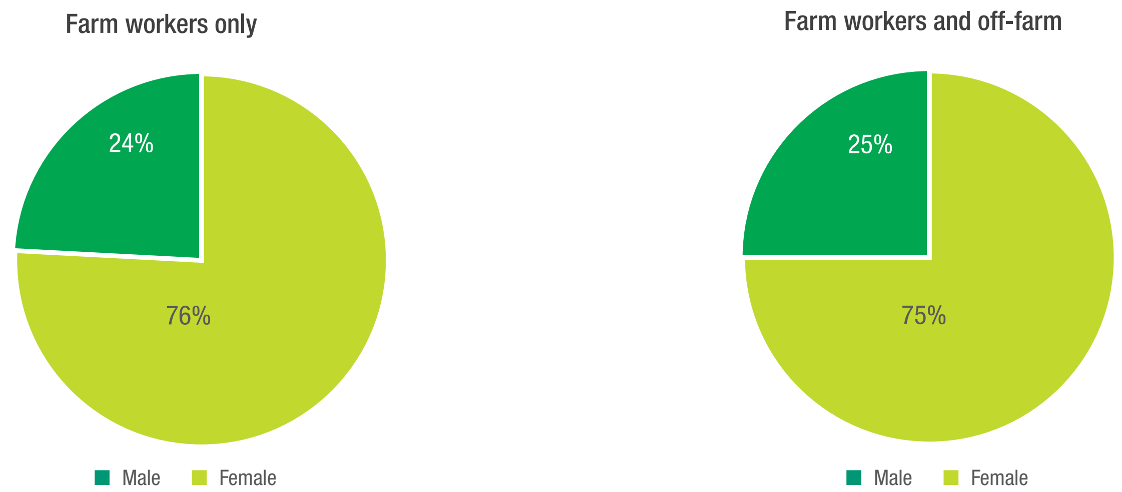
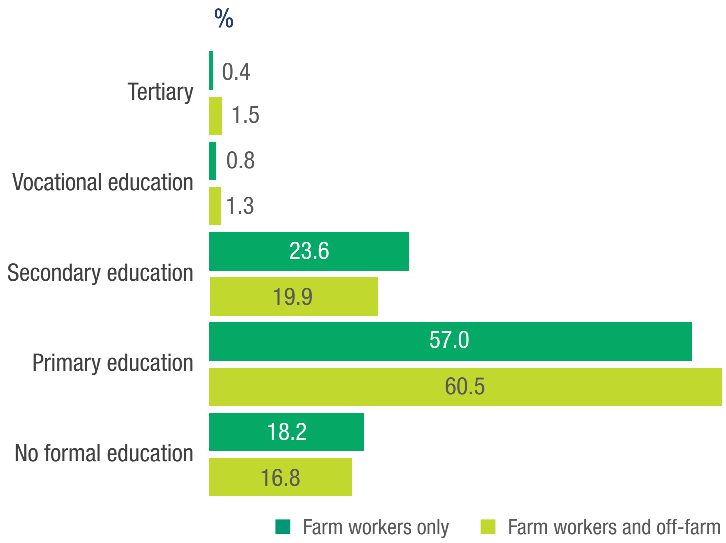


Figure 43: Age of farm workers

Figure 44: Level of education of commercial farmers



4.2 Level of financial inclusion

4.2.1 Overall levels of financial inclusion

The following section summarises the overall levels of financial inclusion among farm workers, i.e. the uptake of financial products and/or services, including all forms of banking, savings, credit, remittances, insurance, mobile money, and informal mechanisms.

As shown in the figures below, farm workers who also have other sources of income including off-farm work are more likely to be financially included (both served formally and informally). 91% of those with additional sources of income are financially included, compared to 86% of farm workers who only rely on rural wage labour.

The financially included farm workers include those who are:

- **Formally served:** 65% of farm workers who only receive an income from rural wage labour have or use products or services from financial institutions that are regulated through an Act of law (formal financial institutions), which is driven by other formal (non-bank) financial products/services, compared to 66% of farm workers with additional sources of income, and the national average of 68%.

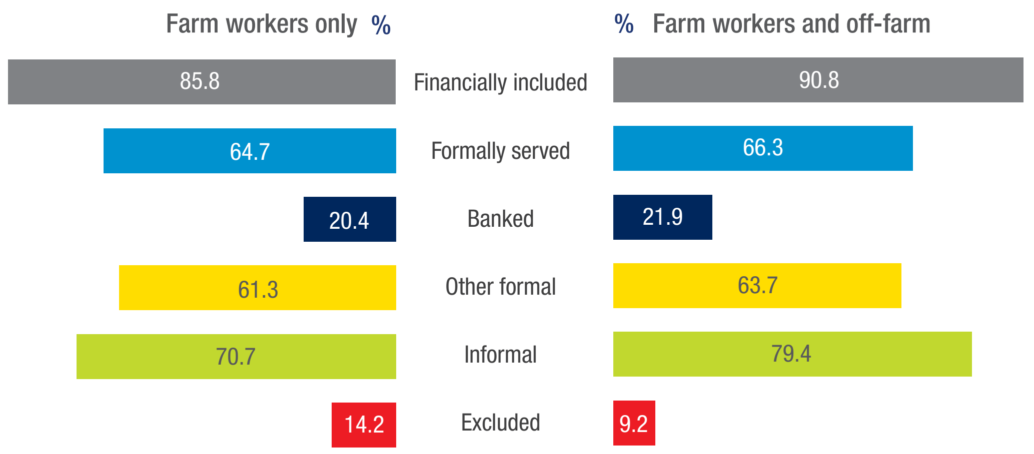
- **Informally served:** 71% of farm workers who only receive an income from rural wage labour have or use products or services from financial institutions that are not regulated (informal financial institutions and mechanisms) and/or use community based organisations/mechanisms to save or borrow money, compared to 79% of farm workers with additional sources of income, and the national average of 71%.

The formally served farm workers further includes those who are:

- **Banked:** 20% of farm workers who only receive an income from rural wage labour have or use products or services from licensed commercial banks that are regulated by the central bank, compared to 22% of farm workers with additional sources of income, and the national average of 26%.

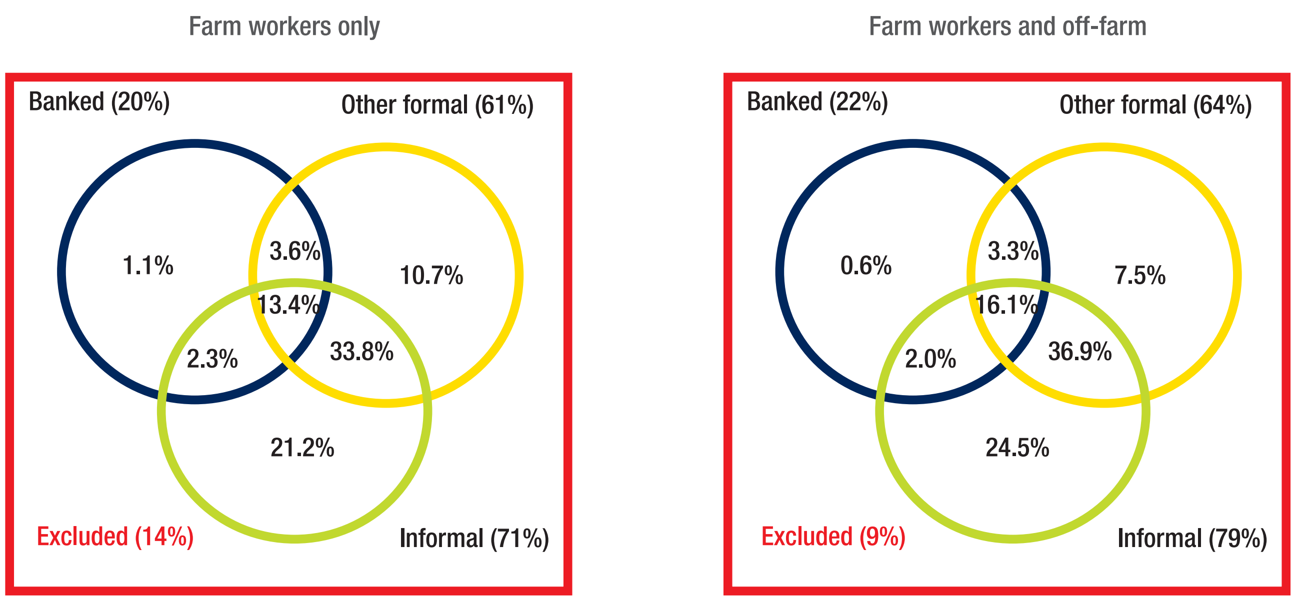
- Served by **other formal** financial institutions (non-bank): 61% of farm workers who only receive an income from rural wage labour have or use products or services from financial institutions that are regulated through Acts of law but which are not commercial banks, compared to 64% of farm workers with additional sources of income, and the national average of 65%. That is mainly driven by the uptake of mobile money, as well as the continued increase of Umurenge SACCOs. About 34% of farm workers who only receive an income from rural wage labour are members of Umurenge SACCOs, compared to 37% of farm workers with additional sources of income, and the national average of 51%.

Figure 45: Farm workers overview of financial products/services uptake



As illustrated in the figure below, there are a number of **overlaps** in the uptake of financial products and services, especially with regard to the uptake of other formal and informal mechanisms.

Figure 46: Farm workers overlaps in product uptake



The **Access Strand** removes the overlaps using a hierarchical approach to depict the uptake of financial products/services, showing that:

- 14% of farm workers who only receive an income from rural wage labour are financially excluded, compared to 9% of farm workers with additional sources of income
- 21% of farm workers who only receive an income from rural wage labour only rely on informal mechanisms to manage their financial lives, compared to 25% of farm workers with additional sources of income. They do not use/have any formal financial products/services
- 44% of both farm workers' segments have/use other formal non-bank financial products/services. They do not use financial products/services offered by a commercial bank. They might, however, also use informal mechanisms to manage their financial lives
- 20% of farm workers who only receive an income from rural wage labour are banked, compared to 22%. They might also have/use financial products/services offered by other formal non-bank institutions and/or informal financial mechanisms.

Figure 47: Farm workers Access Strand

The following sections look at the uptake of specific product categories and financial behavior in more detail, namely banking, savings and investments, credit and borrowing, insurance and risk mitigation, as well as remittances and mobile money.

4.2.2 Banking and payments

Although overall levels of financial inclusion are relatively high in Rwanda, the FinScope survey found that farm workers in Rwanda are largely unbanked. About 80% of farm workers who only receive an income from rural wage labour do not have a bank account in their names or joint accounts and/or are using banking channels or services[12] to manage their finances, compared to 78% of farm workers with additional sources of income. The main barriers to banking relate to insufficient or irregular income (83% and 86% respectively). In turn, 20% and 22% respectively are banked, which is mainly driven by savings (37% and 46% respectively), and the desire to keep money safe (31% and 21%). Further, 27% of farm workers with additional sources of income said they have a bank account to process income payments.

20% of farm workers who only receive an income from rural wage labour are banked

Drivers

Farm workers in Rwanda have a bank account/use banking services mainly to:

- Save money (37%)
- Keep money safe (31%)
- To process income (8%)

80% of farm workers who only receive an income from rural wage labour are not banked

(neither direct nor indirect)

Barriers

Farm workers do not have a bank account mainly due to monetary reasons (affordability):

- Insufficient money coming in (83%)
- Charges too high (4%)
- Banks are too far away (5%)

[12] Other banking services refer to banking services over the counter (OTC), e.g. paying school fees, receiving income and remitting through a bank without having an account in their name.

22% of farm workers with additional sources of income are banked

Drivers

Farm workers in Rwanda have a bank account/use banking services mainly to:

- Save money (46%)
- Keep money safe (21%)
- To process income (27%)

78% of farm workers with additional sources of income are not banked
(neither direct nor indirect)

Barriers

Farm workers do not have a bank account mainly due to monetary reasons (affordability):

- Insufficient money coming in (86%)
- Charges too high (4%)
- Banks are too far away (4%)

4.2.3 Savings and investments

Savings are the leading product type and one of the main drivers of financial inclusion for farm workers in Rwanda. In total, 86% of farm workers who only receive an income from rural wage labour save, compared to 90% of farm workers with additional sources of income. Farm workers mainly save to pay for living expenses when times are hard (68% and 66% respectively), indicating their high vulnerability and dependency on seasonal work which often results in low/irregular income. In turn, only 14% of farm workers who only receive an income from rural wage labour do not save, compared to 10% of farm workers with additional sources of income. Farm workers do not save mainly because of monetary reasons. 60% and 64% respectively said that they do not have the money to save, and/or do not have a job (17% and 20% respectively).

86% of farm workers who only receive an income from rural wage labour save

Drivers

Farm workers in Rwanda mainly save:

- To pay for pay for living expenses when times are hard (68%)
- Developmental purposes (15%)
- Medical and non-medical emergencies (11%)

14% of farm workers who only receive an income from rural wage labour do not save

Barriers

Farm workers do not save mainly due to monetary reasons (affordability):

- Do not have money (60%)
- Do not have job (17%)

90% of farm workers with additional sources of income save

Drivers

Farm workers in Rwanda mainly save:

- To pay for pay for living expenses when times are hard (66%)
- Developmental purposes (14%)
- Medical and non-medical emergencies (11%)

10% of farm workers with additional sources of income do not save

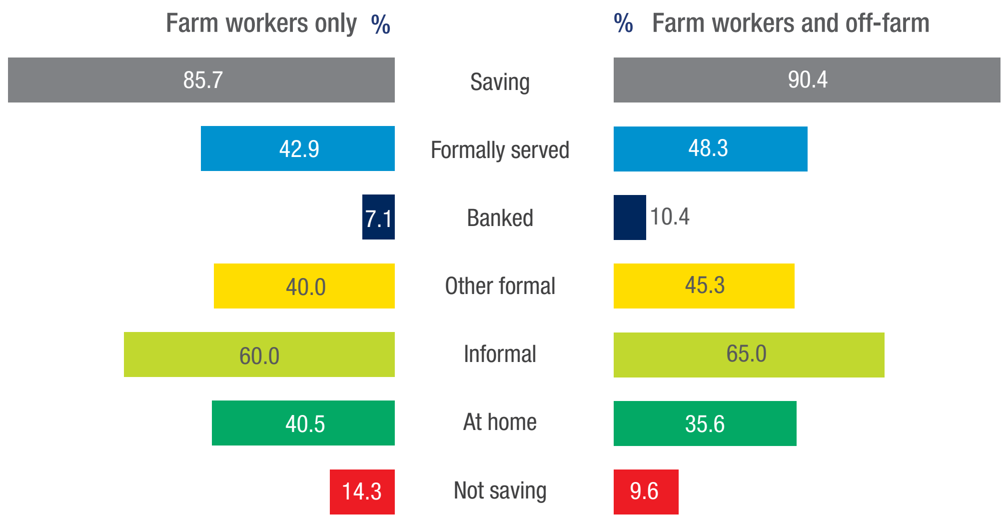
Barriers

Farm workers do not save mainly due to monetary reasons (affordability):

- Do not have money (64%)
- Do not have job (20%)

The figure below illustrated the uptake of savings products/mechanisms. As shown, saving through informal savings groups (60% and 65% respectively) and SACCOs (other formal 40% and 45% respectively) is particularly popular. They are not only a viable alternative for the vast number of farm workers unlikely to be served by commercial banks, they are also the catalyst for enhanced social capital, as well as community social and economic development. 41% of farm workers who only receive an income from rural wage labour save at home, compared to 36% of farm workers with additional sources of income.

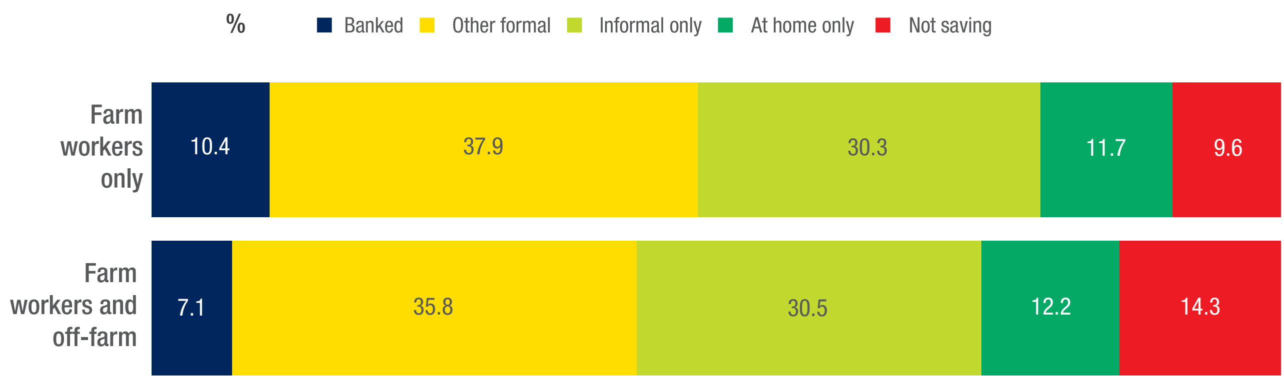
Figure 48: Farm workers overview of savings products/services uptake



Savings Strand: In constructing this strand, the overlaps in savings product/services usage are removed, showing that:

- 14% of farm workers who only receive an income from rural wage labour do not save at all, compared to 10% of farm workers with additional sources of income
- 12% of farm workers (both segments) keep all their savings at home, i.e. they do not have/use formal or informal savings products or mechanisms
- 31% of farm workers who only receive an income from rural wage labour rely on informal mechanisms such as savings groups (they might also save at home, but they do not have/use any formal savings products), compared to 30% of farm workers with additional sources of income
- 36% of farm workers who only receive an income from rural wage labour have/use other formal non-bank savings products (they might also have/use informal savings mechanisms and/or save at home, but they do not have/use savings products from a commercial bank), compared to 38% of farm workers with additional sources of income
- 7% of farm workers who only receive an income from rural wage labour have/use savings products from a commercial bank (they might also have/use other formal and/or informal mechanisms, and/or save at home), compared to 10% of farm workers with additional sources

Figure 49: Farm workers Savings Strand



4.2.4 Credit and borrowing

Farm workers are less likely to borrow than to save. Interestingly, farm workers with additional sources of income are more likely to borrow than those who only receive an income from rural wage labour. In total, 65% of farm workers who only receive an income from rural wage labour borrow, compared to 76% of farm workers with additional sources of income. Farm workers mainly borrow money for developmental purposes (e.g. education, business, and farming). Of concern, however, is that 29% and 34% of farm workers borrow money to pay for livings expenses when times are hard which further increases their vulnerability. In turn, 35% of farm workers who only receive an income from rural wage labour do not borrow, compared to 24% of farm workers with additional sources of income. Farm workers do not borrow mainly because they are worries they would not be able to pay it back (44% and 56% respectively). Interestingly, 40% and 23% of farm workers respectively said they did not need to borrow money – mainly because they cut down expenses when they ran out of money (see risk mitigation section 4.2.6).

65% of farm workers who only receive an income from rural wage labour borrow
(mainly from informal sources)
Drivers

Farm workers in Rwanda mainly borrow:

- Developmental activities - education, business and farming (48%)
- To pay for pay for living expenses when times are hard (29%)
- Medical and non-medical emergencies (20%)

35% of farm workers who only receive an income from rural wage labour do not borrow

Barriers

Farm workers do not borrow mainly because they:

- Are worried that they would not able to pay back the money (44%)
- Did not need to borrow the money (40%)
- Do not have security (11%)

76% of farm workers with additional sources of income borrow
(mainly from informal sources)
Drivers

Farm workers in Rwanda mainly borrow:

- Developmental activities - education, business and farming (37%)
- To pay for pay for living expenses when times are hard (34%)
- Medical and non-medical emergencies (19%)

24% of farm workers with additional sources of income do not borrow

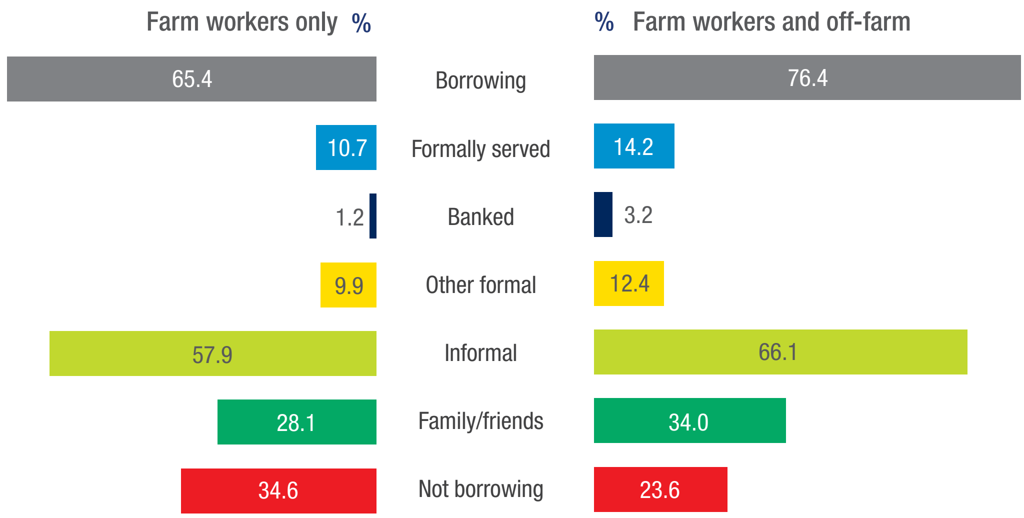
Barriers

Farm workers do not borrow mainly because they:

- Are worried that they would not able to pay back the money (56%)
- Did not need to borrow the money (23%)
- Do not have security (14%)

The figure below summarises the uptake of credit products/services. The percentage of farm workers taking a loan from a commercial bank is only 1% for farm workers who only receive an income from rural wage labour, and 3% for those farm workers with additional sources of income. Farm workers also lag behind in taking up credit from other formal (non-bank) institutions (10% and 12% respectively). As shown below, the majority of farm workers rely on borrowing from informal groups (58% and 66% respectively). The importance of informal groups to enhance financial inclusion among farm workers cannot be stressed enough especially in remote areas. 28% of farm workers who only receive an income from rural wage labour rely on family/friends, compared to 34% of farm workers with additional sources of income.

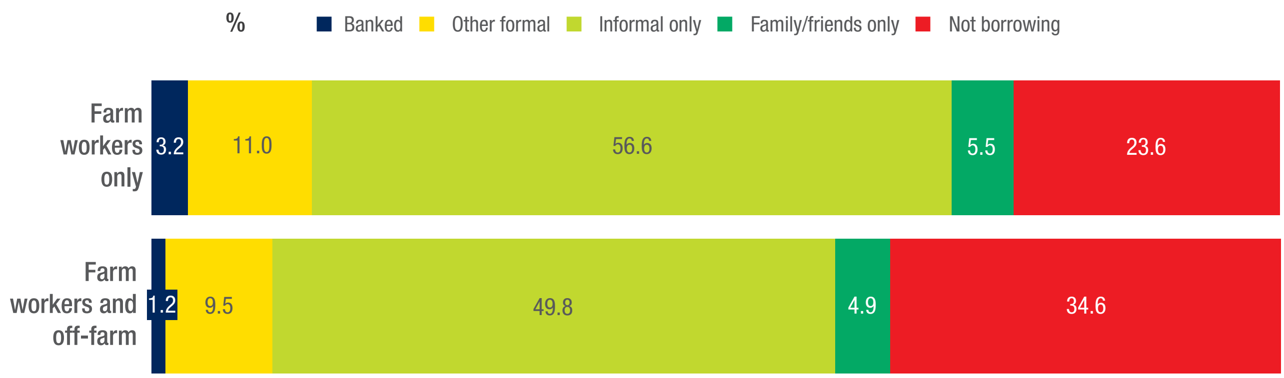
Figure 50: Farm workers overview of credit products/services uptake



Credit Strand: In constructing this strand, the overlaps in credit product/services usage are removed, showing that:

- 35% of farm workers who only receive an income from rural wage labour do not borrow at all, compared to 24% of farm workers with additional sources of income
- 5% of farm workers who only receive an income from rural wage labour only rely on friends and/or family, i.e. they do not have/use formal or informal credit products or mechanisms, compared to 6% of farm workers with additional sources of income
- 50% of farm workers who only receive an income from rural wage labour rely on informal mechanisms such as savings groups and money lenders (they might also borrow from family/friends, but they do not have/use any formal credit products), compared to 57% of farm workers with additional sources of income
- 10% of farm workers who only receive an income from rural wage labour have/use other formal non-bank credit products (they might borrow from informal sources and/or borrow from friends, but they do not have/use credit products from a commercial bank), compared to 11% of farm workers with additional sources of income
- Only 1% of farm workers who only receive an income from rural wage labour have/use credit products from a commercial bank (they might also have/use other formal and/or informal mechanisms, and/or borrow from friends/family), compared to 3% of farm workers with additional sources of income.

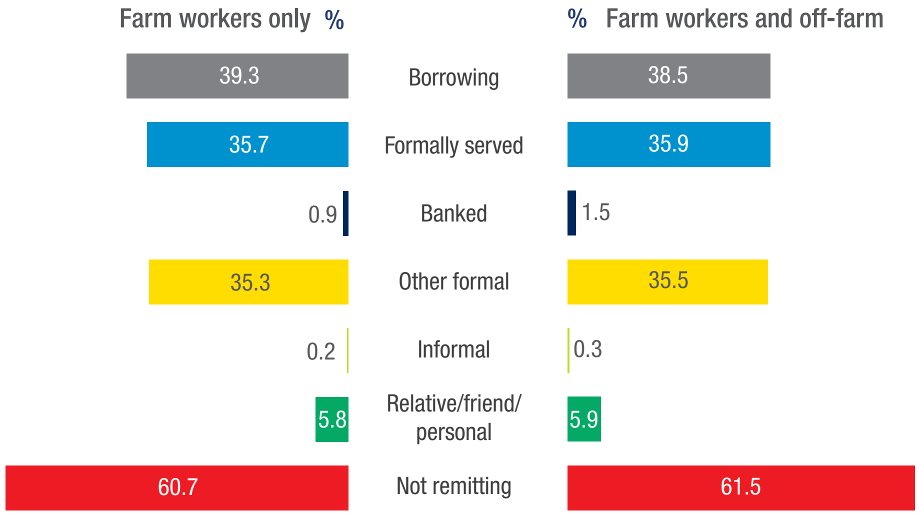
Figure 51: Farm workers Credit Strand



4.2.5 Remittances

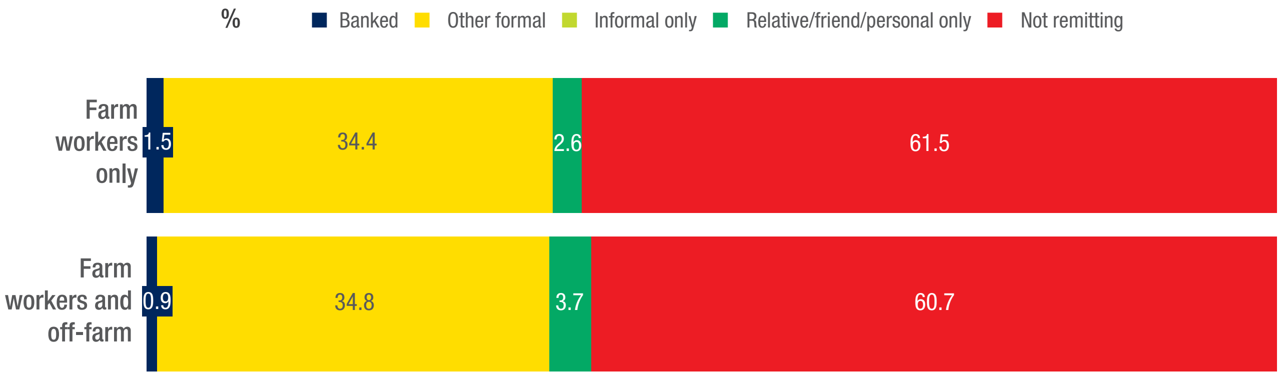
Around 39% of farm workers in Rwanda either sent and/or received money from people living in a different place (within the country and/or outside Rwanda). The most common mechanism used to transfer money is through formal channels (i.e. mobile money). Around 6% of farm workers still send or receive money in cash through a relative/friend or deliver it in person. The figure below summarises the uptake by remittance channels.

Figure 52: Farm workers overview of remittances products/services uptake



Remittances Strand: The Remittances Strand shows that there are hardly any overlaps in the uptake of remittance channels.

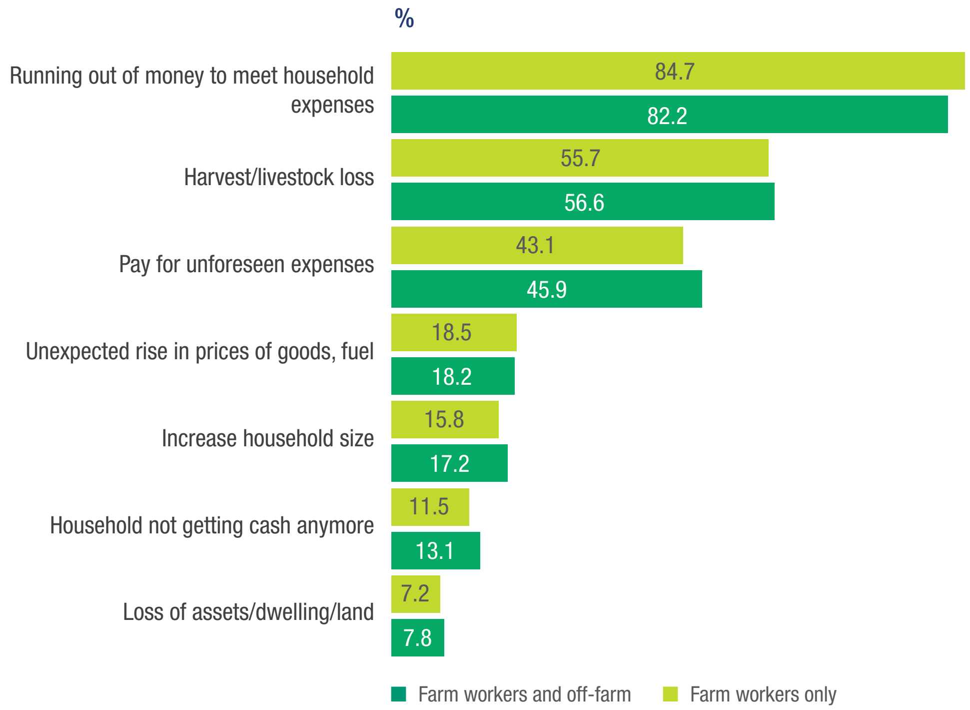
Figure 53: Farm workers Remittances Strand



4.2.6 Insurance and risk mitigation

To pay for livings expenses when times are hard is a main driver for both savings and borrowing. As such it is not surprising that running out of money to meet household expenses is reported as the main financial risk experienced by 82% of farm workers who only receive an income from rural wage labour in the past 6 months prior to the survey. This figure is even higher for farm workers with additional sources of income with 85%. Most farm workers dealt with it by cutting down expenses (32% and 34% respectively) and/or borrowed money (31% and 34% respectively), which increases their vulnerability. Coping strategies for harvest and livestock losses (experienced by 57% and 56% respectively) include cutting down expenses, use savings, and borrow money. Less than 1% claimed an insurance policy.

Figure 54: Farm workers' financial risks experienced during the past 6 months



About 82% of farm workers who only receive an income from rural wage labour are covered by Mutuelle de Sante, compared to 78% of farm workers with additional sources of income. However, other risk cover is low in Rwanda. In total, only 3% of farm workers who only receive an income from rural wage labour are covered by an insurance product, compared to 7% of farm workers with additional sources of income. Insurance cover is mainly driven by medical insurance (60% and 76% respectively), as well as Rwanda's Social Security Board (23% and 40% respectively). In turn, 97% of farm workers who only receive an income from rural wage labour do not have an insurance/pension product, compared to 93% of farm workers with additional sources of income. Main barriers to the uptake of insurance relate to monetary reasons (cannot afford it 57% and 61% respectively), as well as lack of consumer awareness/knowledge (do not know how it works, where to get it, never heard about it).

3% of farm workers who only receive an income from rural wage labour have insurance

Drivers

Product uptake is driven by:

- Medical insurance (60%)
- Rwanda's Social Security Board (23%)

97% of farm workers who only receive an income from rural wage labour do not have insurance

Barriers

Main barriers to the uptake of insurance relate to:

- Cannot afford (57%)
- Does not know how it works and where to get it (22%)
- Has never heard about it (18%)

7% of farm workers with additional sources of income have insurance

Drivers

Product uptake is driven by:

- Medical insurance (76%)
- Rwanda's Social Security Board (40%)

97% of farm workers who only receive an income from rural wage labour do not have insurance

Barriers

Main barriers to the uptake of insurance relate to:

- Cannot afford (61%)
- Does not know how it works and where to get it (22%)
- Has never heard about it (15%)

4.2.7 Mobile money

Cellphone access and ownership continue to increase in Rwanda with 85% of farm workers who only receive an income from rural wage labour owning/having access to a cellphone, compared to 87% of farm workers with additional sources of income. As such, the uptake of mobile money has also increased over the past years with 31% of farm workers who only receive an income from rural wage labour having/using a mobile money account, compared to 35% of farm workers with additional sources of income. Farm workers mainly use their mobile money account to remit money (59% and 58% respectively), but also to save money (14% and 15% respectively) which poses a real opportunity for financial inclusion. In turn, 69% of farm workers who only receive an income from rural wage labour do not use mobile money, compared to 65% of farm workers with additional sources of income, mainly because of a lack of consumer awareness (lack of product knowledge, do not know how to use it).

31% of farm workers who only receive an income from rural wage labour use mobile money

Drivers

Product uptake is driven by:

- Remittances (59%)
- Saw other people using it/advertisement (22%)
- Savings or to store money (14%)

69% of farm workers who only receive an income from rural wage labour do not use mobile money

Barriers

Main barriers to the uptake of mobile money relate to lack of consumer awareness and knowledge, e.g.

- Lack of product knowledge (53%)
- Do not know how to use it (26%)
- Do not need it (12%)

35% of farm workers with additional sources of income use mobile money

Drivers

Product uptake is driven by:

- Remittances (58%)
- Saw other people using it/advertisement (25%)
- Savings or to store money (15%)

65% of farm workers with additional sources of income do not use mobile money

Barriers

Main barriers to the uptake of mobile money relate to lack of consumer awareness and knowledge, e.g.

- Lack of product knowledge (57%)
- Do not know how to use it (21%)
- Do not need it (9%)

5 Recommendations and implications for stakeholders

5.1 Recommendations

As shown in this report, financial inclusion among farmers in Rwanda is relatively high and varies between 86% and 91%. Nevertheless, there is opportunity to further growth, especially in terms of deepening financial inclusion beyond access and moving towards a greater level of formal inclusion (particularly with regard to the uptake of banking products/services) which require a holistic approach to poverty alleviation and rural development, constant innovation, capacity building and financial education, as well as persistent monitoring of progress (e.g. using FinScope surveys and additional research).

Holistic approach to rural development and poverty alleviation - The study shows that various constraints might prevent farmers from engaging with (formal) financial products/services. They refer to both specific ones related to the financial sector and overarching structural issues such as low levels of education and low/irregular incomes. Hence, rural development and financial inclusion require a holistic approach and the buy-in from all its stakeholders, including government, the financial sector, and the private sector, for example through partnerships, contracts and triparty arrangements.

Capacity building and financial education - Low levels of education among farmers is a major challenge in the sector. Often, farmers lack business skills like record-keeping, understanding market needs, preparing funding proposals, and the standards required of their produce. Further, there is a need to transform the sector from subsistence agriculture to a more market-oriented approach, which would also to improve the credibility of farmers when borrowing from financial institutions. Financial capability and confidence especially with regard to formal financial services has also been shown to be a key barrier (i.e. for the uptake of mobile money and insurance), particularly for farmers that have little or no experience with financial services. As such, access to information and consumer education becomes important, which calls for further strategic intervention from both the private and public sector. An improved understanding of benefits, costs and risks of financial services increases the likelihood of the beneficial use of appropriate financial services. Given that formal inclusion is driven by the uptake of other formal financial products/services (i.e. mobile money), promoting these products /services to farmers poses a real opportunity for financial inclusion.

Innovation - Although distance to the bank hasn't been reported as a major barrier, (geographical) convenience might still be a driver of the uptake of financial products/services given the preference for informal mechanisms, savings at home, and borrowing from family/friends. Moving towards increased uptake of Umurenge SACCOs and mobile money might be key channels to facilitate easy access and to reduce the vulnerability particularly of farmers residing in remote areas. Information on savings and borrowing behavior of farmers might also present an opportunity for FSPs to provide insights into farmers' financial needs and performance as responsible borrowers.

5.2 Implications for stakeholders

Financial inclusion is seen as a major driver of economic development in Rwanda. However, access to formal financial services by farmers is still limited across the country. Location plays a particularly important role, as adults residing in rural areas are much more under-served (i.e. relying on informal mechanisms only) than those living in urban areas. The analysis in this report offer many opportunities for improving farmers' financial inclusion in Rwanda.

5.2.1 Recommendations for policy-makers and regulators

Create awareness to policy-makers and other stakeholders with regard to the financial needs of farmers in different market segments, bringing farmers associations into policy dialogue – Policy-makers can encourage the adoption of effective policy measures. It is recommended that stakeholders identify and endorse policy champions for fostering farmers' financial inclusion. The central bank, as the custodian of financial inclusion programme/agenda in Rwanda, can reinforce the implementation of a self-check tool (sector check-list) for the commercial banks, MFIs and SACCOs in the country. This set-up could encourage the financial services providers to check whether their financial products and services address farmers' needs.

Dedicated training/financial education programmes targeted at farmers - This report showed that farmers often have lower levels of education and that they are more likely to be lacking awareness of innovative financial products. Policy-makers can promote and drive the public-private partnership that leads to greater financial inclusion for farmers through a coordinated national financial education strategy. Continued modification and adjusting of legal, regulatory and supervisory frameworks – this relates to continuous monitoring, removing impediments and allowing space for innovation to allow greater financial inclusion for Rwandan farmers.

Information dissemination - Policy-makers to recommend and share financial sector policy and strategies and make them available to other stakeholders involved in the policy-making and advocacy process (networks, associations and other civil society organisations as well as donor agencies). These financial and agricultural sector recommendations can be useful to set financial inclusion targets, to support the assessment of financial needs, and to design appropriate services for farmers according to their context (e.g. seasonality, weather patterns, and level of poverty).

As such, the Government of Rwanda supports research projects and has developed numerous agricultural and financial strategies guided by Vision 2020 and the Financial Sector Development Program (FSDP), which are available online on the Ministry of Finance and Economic Planning website[13], such as the following:

- *Building an Inclusive Financial Sector in Rwanda* (BIFSIR) project, funded by UNDP/UNCDF to scale up entrepreneurial capacity building, financial education and financial linkages to target groups of youth and women.
- *Crop and Livestock Insurance Feasibility Study* to explore the potential of developing crop and livestock insurance in Rwanda.
- *National Financial Education Strategy* (NFES) aimed at deepening and broadening the financial literacy of Rwandans.
- *National Microfinance Policy Implementation Strategy* 2013-2017 to offer guidance to microfinance players and develop the sector over the next few years.
- *Rural and Agricultural Financial Services Strategy* to enable to shift from subsistence agriculture towards market-oriented agriculture with particular focus on financing agricultural value chains.
- *Saving Mobilisation Strategy* to strengthen financial infrastructure, mobilise savings and help culture of saving.
- *FinScope surveys* which are supported by the Government of Rwanda and have been conducted in 2008, 2012 and 2016.

5.2.2 Recommendations for NGOs and other development agencies

Strengthening informal FSPs to expand outreach of financial services to rural areas - Accessibility of informal financial service providers and their ability to design products that suits the needs of individuals (specifically farmers) makes them ideal providers at district levels. However, informal operators may not have the technical know-how of managing financial services and may also lack resources to satisfy the needs of all their clients. Building the financial and managerial capacity of informal financiers may allow majority of farmers to obtain quality financial services at a lower cost.

Demand-driven research and data, research institutes, donors – It is recommended that development agencies continue to support the sector through identifying measures for key dimensions of financial inclusion among farmers (e.g. % of farmers within 1-hour travel of a branch/agent or dashboard on m-money services awareness/usage) that can be regularly updated, and establish systems for regular reporting/collection of information needed to measure the defined indicators.

Specialised agricultural finance tools and guides - Specialised tools such as Information Management Systems developed by development agencies and research institutes, tools like the Agricultural Lending Analysis System (ALAS), credit scoring tools and agricultural mapping (see above), as well as studying the agricultural value chain can assist FSPs and other stakeholders with information for designing new products and services, mitigating risks, lowering their costs, and making appropriate decisions that foster the financial inclusion of farmers[14].

5.2.3 Recommendations for financial service providers (FSPs)

FSP and telcos to promote financial education - Financial education programs targeted at farmers will enable them to develop a reasonable understanding about the language used by FSP (such as banks, MFI) on the benefits of owning a formal financial account and how to apply for it, as well as varieties of bank products/services. Farmers also need to develop financial literacy in order to present funding proposals that are attractive to FSPs. This includes organising farmers and linking them to FSPs.

Recognising the role of cooperatives and SACCOs – As shown in this report, cooperatives and SACCOs are very important in improving access to finance in agriculture. They have closer proximity to adults residing in remote rural areas and as such can reach more farmers at a lower cost. Further, they usually lend small amounts that farmers need and but cannot be provided by FSPs. As such, it is recommended that FSPs develop stronger partnerships with cooperatives and SACCOs in order to achieve the desired results.

---

[13] The URL links are provided under the section References.

[14] Some interesting agricultural lending tools developed by AgriFin (World Bank) with financial institutions in Africa and Asia are available online at https://www.agrifinfacility.org/agricultural-lending-tools-corner. They include agricultural lending guidelines, credit assessment tools, product sheets, training materials, and value chain assessments. are available online at https://www.agrifinfacility.org/agricultural-lending-tools-corner

Understanding the market for a specific service – As shown in this report, farmers have different financial services' needs. It is important that FSPs understand these needs and circumstances under which they operate (e.g. seasonality, remoteness) to be able to design suitable products and services. Hence, it is recommended to employ specialised agricultural officers who understand the sector. These officers could help to design products, handle agricultural loan facilities, as well as offer financial and business advice to the farmers.

Innovation along the agricultural value chain – Given the specific needs of farmers, it is recommended that FSPs use innovative product development along the agricultural value chain[15], such as business development funds (BDFs), weather-based crop insurance, and warehouse receipt schemes.

- **Savings:** Micro-group financing could provide a risk sharing facility targeting farmers' savings groups. Deepening rural, branchless and mobile banking/vans could be an example of financial services designed to meet the requirements of farmers who are faced by remoteness.

- **Credit:** FSPs should consider the seasonality of the sector when designing their products. As such, the timing of the loan disbursement, for example, should be in accordance with the agricultural seasons. Small loan amounts can be disbursed for different activities at different stages of the season, such as credit for seeds during the pre-sowing phase, pest management and fertilizers during sowing and vegetative phase, as well as loan disbursements during and post-harvesting. It is important, however, not to overfund or underfund agricultural activities. Otherwise the risk of non-repayment increases. In addition, flexibility with regard to the type of collateral required makes it possible for more farmers to borrow.

- **Insurance:** As mentioned above, it is imperative to understand the sector; not only to design new products and services that meet farmer's needs but also to develop appropriate risk mitigation strategies. A multi-stakeholder approach is recommended here. For example, agricultural, financial, and meteorological experts can assist a consortium of insurance companies to underwrite specific micro-insurance products, taking existing and emerging risks (e.g. climate change) into account.

- Further, it is recommended to combine financial products / package them together such as savings and credit, as well as insurance to reduce costs, and therefore making them more affordable to farmers, as well as to mitigate the risks of non-repayment. For example, one of the major reasons for defaults on loan payments is crop failure as a result of drought. Combining loan disbursement with a weather-based crop insurance scheme seems sensible.

Leveraging the mobile phone access and ownership – Rwanda has good penetration of cellphones, providing a huge opportunity to grow the number of mobile money uptake and usage. A number of farmers who are served only through informal mechanisms are not aware of mobile money services. A further segment that is aware of mobile money services does not understand how it could benefit them or to operate mobile money services. Effective marketing from the FSP is therefore necessary for mobile money services to reach scale among farmers in Rwanda.

Supporting the digital financial services - Electronic money transfers are key to lowering the cost of remittances for poor economies that heavily depend on such transfers and technology. It is currently evolving at a fast pace and therefore costs will be significantly lower in the near future, favoring local development and financial inclusion[16].

[15] For a practical guide on agricultural value chain finance please refer to Cuevas, C. and Pagura, M. 2016.

[16] For a practical guide on how to use digital financial services in agriculture please refer to Martin, C. et. al. 2016.

6 References

AFR 2015. Agricultural finance conference report. 7-8 October 2015. Available online at URL:
http://www.fsdafrica.org/wp-content/uploads/2015/11/AFR-AFC-Report-04.11.15.pdf

AFR 2015. Supporting agricultural finance. Available online at URL:
http://www.afr.rw/wp-content/uploads/2015/11/Supporting-agriculture-finance-in-Rwanda-Brief.pdf

Bizimana, C. et.al. 2012. Trends in Key Agricultural and Rural Development Indicators in Rwanda. Available online at URL:
http://www.minagri.gov.rw/fileadmin/user_upload/documents/RWANDA_SAKSS/Annual_Trends_and_Outlook_Report_2012.pdf

Cuevas, C. and Pagura, M. 2016. The Agricultural Value Chain Finance - A Guide for Bankers. Available online at URL:
http://www.fgda.org/dati/ContentManager/files/Documenti_microfinanza/AVCF-Guide.pdf

GPFI 2015. New trends in agricultural finance. Available online at URL:
http://www.gpfi.org/sites/default/files/documents/02-New%20Trend%20Agricultural%20Finance%20Report-Final-LowRes.pdf

Martin, C. et. al. 2016. Guide to the Use of Digital Financial Services in Agriculture. Available online at URL:
https://www.usaid.gov/sites/default/files/documents/15396/Guide%20to%20DFS%20in%20Ag_Web_Final.pdf

Umuhinzi 2015. Bank loans for agricultural sector must recover. Available online at URL:
http://www.umuhinzi.com/english/9675/whos-to-blame-for-no-bank-loans-to-agricultural-sector/

Other resources shared by the Government of Rwanda, e.g.:

Building an Inclusive Financial Sector in Rwanda (BIFSIR). Available online at URL:
http://www.minecofin.gov.rw/fileadmin/templates/documents/Building_an_Inclusive_Financial_Sector_in_Rwanda.pdf

Crop and Livestock Insurance Feasibility Study. Available online at URL:
http://www.minecofin.gov.rw/fileadmin/templates/documents/AFR_Agri_Feasiblity_Study_FINAL_Agric_insurance.pdf

National Financial Education Strategy (NFES). Available online at URL:
http://www.minecofin.gov.rw/fileadmin/templates/documents/National_Financial_Education_Strategy.pdf

National Microfinance Policy Implementation Strategy 2013-2017. Available online at URL:
http://www.minecofin.gov.rw/fileadmin/templates/documents/National_Microfinance_Policy_Implementation_Strategy.pdf

Rural and Agricultural Financial Services Strategy. Available online at URL:
http://www.minecofin.gov.rw/fileadmin/templates/documents/Rural_and_Agricultural_Financial_Services_Strategy.pdf

Saving Mobilisation Strategy. Available online at URL:
http://www.minecofin.gov.rw/fileadmin/templates/documents/National_Savings_mobilization_strategy.pdf

Economic Development and Poverty Reduction Strategy II 2013 – 2018. Available online at URL:
http://www.minecofin.gov.rw/fileadmin/templates/documents/NDPR/EDPRS_2.pdf

ACCESS TO FINANCE RWANDA

Janine Ampulire
Monitoring, Evaluation and Learning Manager

ACCESS TO FINANCE RWANDA (AFR)
PO Box 1599 Kigali Rwanda
Phone: +250782507751
Email: janine@afr.rw
or
Email: info@afr.rw

FINSCOPE

FINMARK TRUST
Making financial markets work for the poor