



Smallholder Farmer Report Rwanda

ICCO works to give farmers and producers access to local and national markets and the opportunity to build sustainable agricultural systems.

The Strengthening African Rural Smallholders (STARS) Program is a five-year (2016 - 2020) program implemented by ICCO in partnership with the Mastercard Foundation. Through a market systems development approach the program focuses on improving access to finance and markets for 210,000 smallholder farmers in Ethiopia, Rwanda, Senegal and Burkina Faso.

In Rwanda, with an outreach target of 49,000 smallholder farmers, STARS partners with five micro-finance institutions (MFIs) and two commercial banks to develop appropriate financial products. These include credit products for maize and rice farmers that take into account the costs of production and the seasonal cash-flow of farmers. STARS also works with key value chain actors (processors, service providers, cooperatives and unions) to strengthen the value chain and create access to markets, skills training, farm inputs and equipment.

About this report

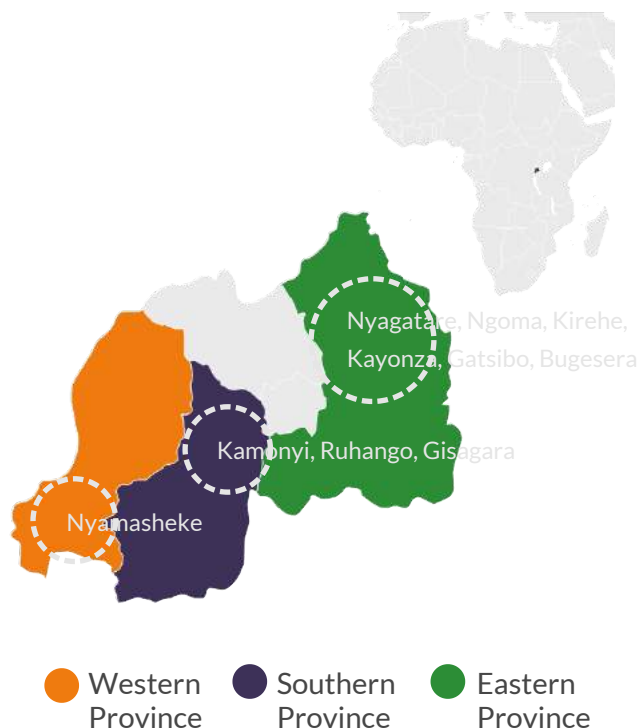
This report will provide information on smallholder farmer households as actors in market systems in the Western, Southern and Eastern Provinces of Rwanda.

We will present information on:

- Demographics
 - Household characteristics
 - Food security
 - Poverty rates
- Farm Characteristics
 - Access to inputs
 - Access to markets
 - Key agricultural constraints
 - Farmer aspirations
- Access to finance

At the end of the report, the core interventions of the STARS program will be presented.

Where STARS works on the rice and maize value chains in Rwanda



We collected data from



406

Households in Western Province



418

Households in Southern Province



238

Households in Eastern Province



589

Rice Smallholder Farmers



8

Focus Group Discussions with 8-10 Farmers in Each Group



1,063

Households in Total



236

Female Headed Households



306

Households Headed by Young Farmers Under 36 Years Old



474

Maize Smallholder farmers



16

Personal Interviews

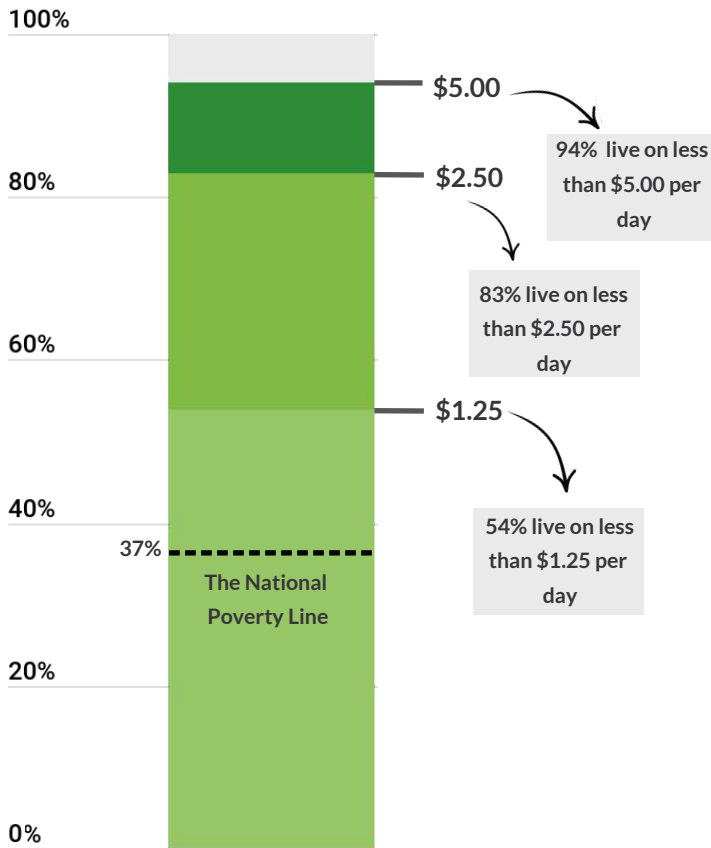


- A *Two-Stage Stratified Cluster Sampling* was employed for this study.
- Producer organizations were primary sampling units and the households within a producer organization's production area were secondary sampling units.
- Value chain and region were used as stratification.
- A significance level of 0.05 was used.
- We selected four producer organizations and two value chains, for focus group discussions and key informant interviews.



The STARS target group is a diverse group of farmers. Many of them still face challenges with poverty and food security

Targeted households display a wide range in poverty levels. Over 60% of the STARS farmers have an income above the national poverty line











The percentages are the estimated poverty rates for all smallholder households based on individual poverty likelihoods. The national and international poverty lines are given by the Poverty Probability Index (PPI) for Rwanda (2005).

The average household size is approx. five. Slightly less than half of the family members earn an income






● Dependents (55%) ● Income Providers (45%)

Ownership of locally important household items

-  **97%** Mosquito net
-  **68%** Mobile phone
-  **53%** Radio/ tape recorder
-  **18%** Bicycle
-  **18%** Solar light/ solar panel
-  **8%** Sofa set
-  **4%** Television
-  **1%** Motorbike (small engine)

Many farmers have little formal schooling

-  **23%** of farmers have no schooling at all
-  **64%** of farmers have attended some years of primary education
-  in **69%** of the households, the oldest female can read and write

Many farmers followed at least one type of skills training



40% of farmers followed agricultural skills training



11% followed financial skills training

Farmers indicated that training and exchange visits facilitated through producer organizations lead to improved farming techniques and increased production

Farmers participating in the focus group discussions

Farmers indicate they want skills training in:



Farming skills to increase production



Business planning



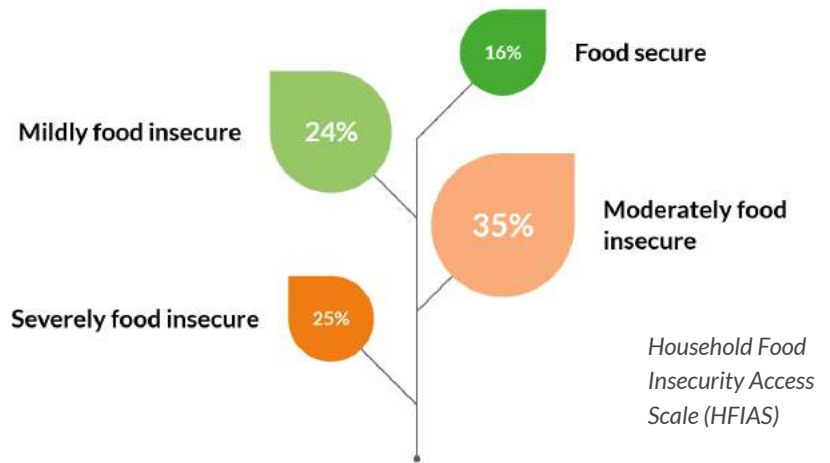
Post harvest management skills such as quality control



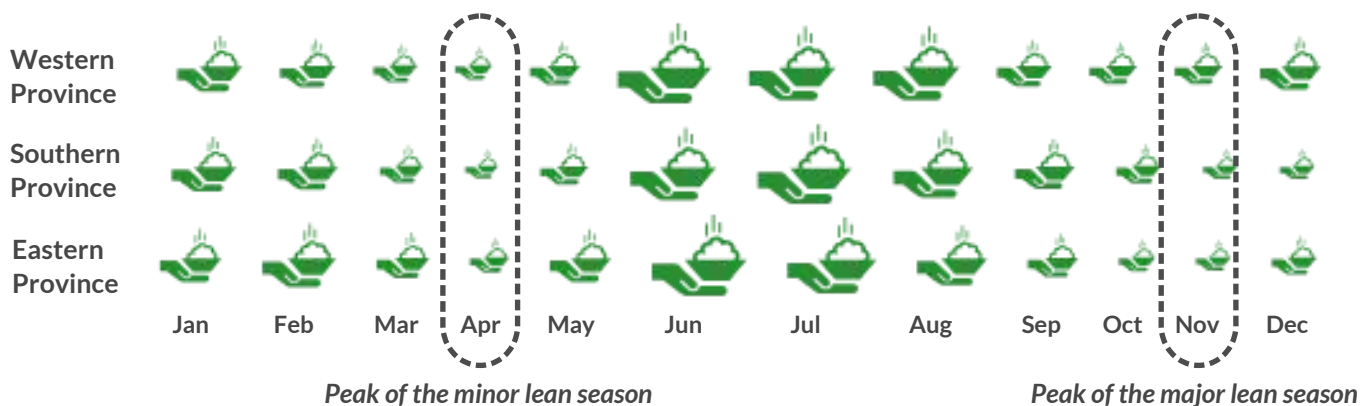
Financial literacy focusing on Loan management and repayment

Only 16% of the smallholder households are food secure

As much as 60% of the households face difficulties in accessing food of sufficient quality and quantity



Food shortages concentrate in the lean seasons

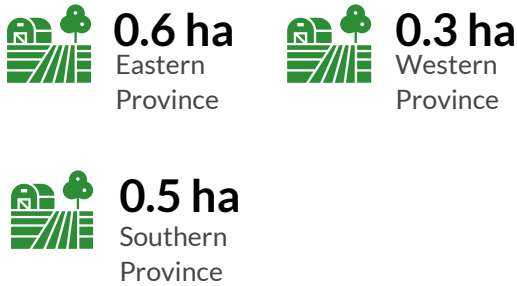


The decreasing size of the symbols indicate that more farmers are experiencing food shortages. Months of Adequate Household Food Provisioning, (MAHFP).

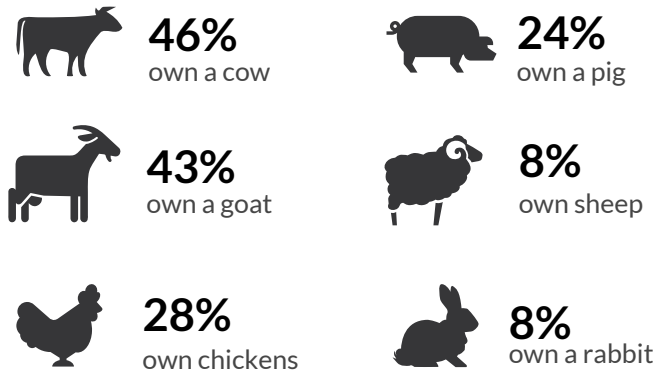


Farmers use farm inputs and access markets but overall still face challenges which affect their yields and sales

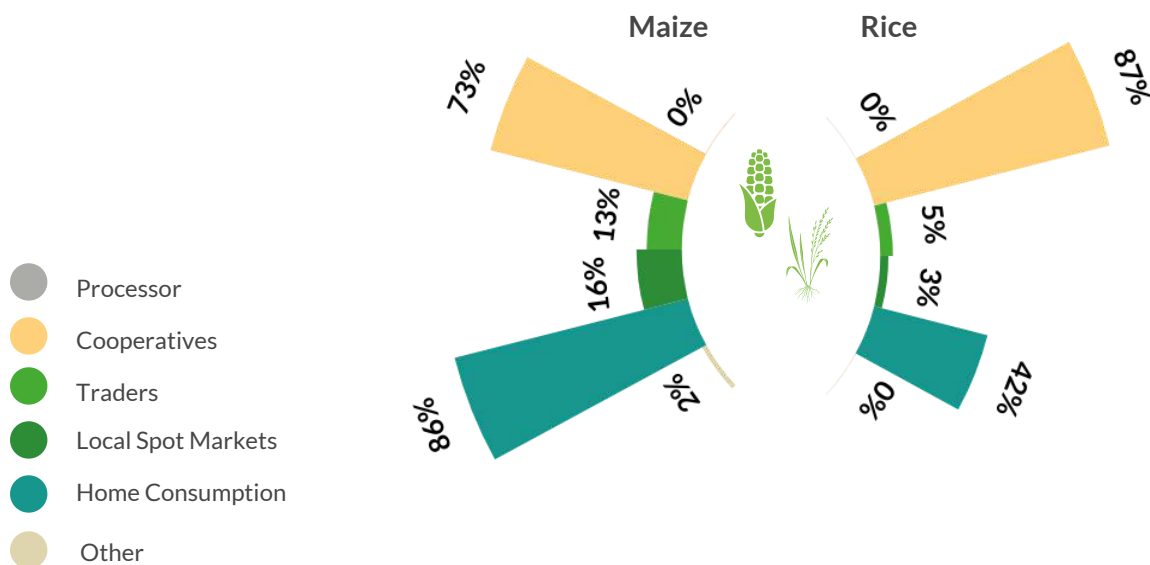
Mean land size that the smallholder uses for cultivation



In addition to land, farmers also own livestock



Smallholder farmers mainly sell their crops through cooperatives. Maize and rice also play an important role in food security at home



The percentage refers to the share of farmers of the sample, not the share of the crop going to a specific channel.

The following inputs are accessed by farmers but the level of access and quality vary



Overall, yields and sales are affected by



Climate uncertainty associated flooding, droughts and unreliable rainfall



Crop affected by Pests and diseases due to the high cost, insufficient, and ineffective pesticides and herbicides



Infertile land due to lack of organic manure to combine with fertilizers

Respecting for the seasonal calendar; planting, harvesting and selling on time; accessing to fertile and large plots of land are key characteristics mentioned by farmers to enhance produce.

Farmers participating in the focus group discussions



Delayed provision of seeds from service providers which prevent farmers from timely planting



Lack of capital to buy inputs such as fertilizer



Lack of modern agricultural and irrigation equipment

"In most cases, we receive seeds 2 weeks after planting date which negatively affect our production. To mitigate this delay, some farmers prefer to use their own seeds that they have kept for long time and in bad conditions which have a further negative impact on their production".

A farmer from Rutsiro District said during focus group discussions



Challenges to access the market due to lack of transportation and poor road conditions



Farmers lose motivation to improve the quality and quantity of their crops due to challenges with their cooperative

women are carrying yields on their back and transporting them on foot...It takes farmers more than an hour to reach to the markets. Old people suffer a lot, as the transport cost is very high.

Farmers participating in the focus group discussions

The STARS farmers are members of cooperatives. These are the benefits and challenges related to the functioning of the cooperatives

Main benefits



Access to financial services



Access to training programs and knowledge sharing



Access to quality agri-inputs like seeds, fertilizer, pesticides



Access to markets and receiving a good price

Main challenges



Limited management and leadership capabilities



Delayed activities due to slow decision making and a different commitment between members



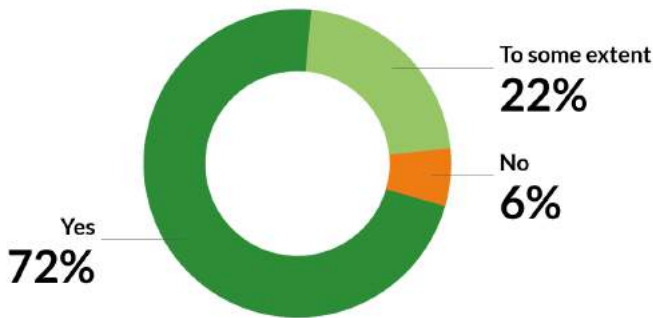
Delayed payment from buyers



Smallholder farmers currently already access credit but the available products and services are not always suitable for their agricultural activities

Most of the farmers are optimistic about their prospects in farming

Farming Gives a Good Life



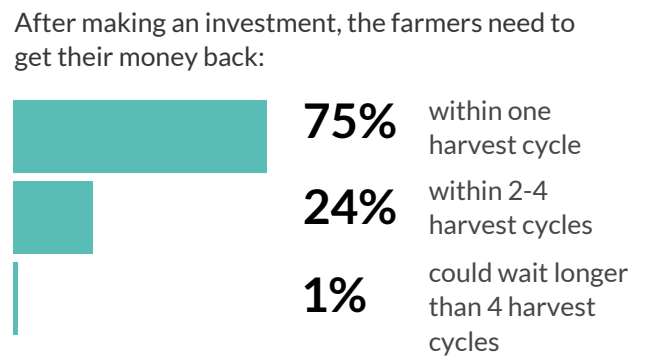
“Farming is a good business but to those who do farming using modern techniques”

Farmers participating in the focus group discussions. Kamonyi District

Half of the farmers are willing to invest in their farm and take a risk

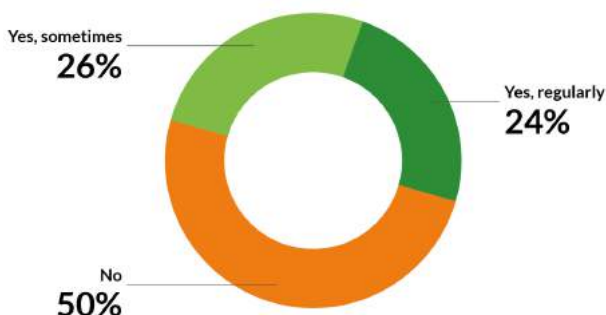


Three quarters of the farmers can only invest in the short term

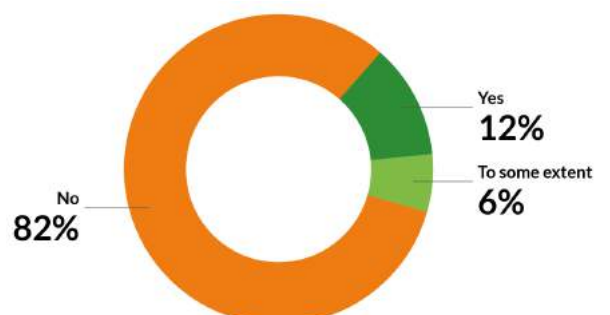


Half of farmers save but few keep financial records

Saving Income



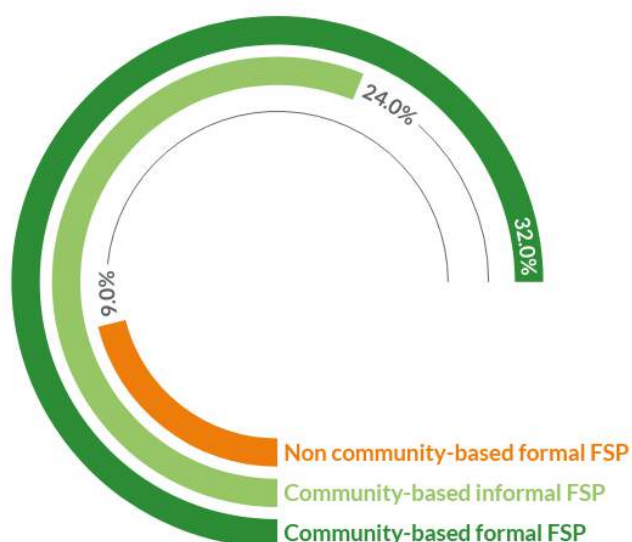
Keeping Financial Records



Credit is widely available but not always at the right time, in the right size and with the loan features that are suitable for smallholder farmers

Farmers participating in the focus group discussions

Farmers use different sources to access loans. Community-based financial service providers (FSP) are the most prominent



The percentage refers to the share of farmers in the sample that access credit through a particular source. Community-based informal FSPs includes lending from a community leader, family, an informal money lender and Village Savings and Loans Associations. Community-based formal FSPs include Savings and Credit Cooperatives, farmer cooperatives and government programs. Non community-based formal FSPs include MFIs and Banks.

The financial products should be suitable for the smallholders

Features that farmers find attractive in a credit product

Product features that limits the likelihood to misuse the loan by spending it on other activities

Low interest rate and loan repayment period that are appropriate to the farmers' needs

Disbursement period and repayment options are more likely to inform farmers; decision making then interest rates

The loan size must match investment needs

Treatment of the farmers and having a sense of respect and understanding, as well as physical proximity, translate into customer loyalty

Product features that are associated with agri-input such as access to agricultural extension workers and high quality inputs

Barriers for women, poor and illiterate smallholder farmers to accessing credit

Female loan applicants are sometimes unable to get a permission for their application from their husbands

Distance to the branch office, associated with travel time and expenses, can cause additional challenges for poorer farmers and for women

Illiterate farmers do not understand finance, which leads to poor financial decision making and unwise investments

Group self-selection can exclude farmers who are not deemed to be responsible, reliable or hard-workers, thus restricting membership of poorer households

The STARS Program in a Nutshell

Problems:

Immediate problems:

Micro-finance institutions (MFIs) cannot provide appropriate agricultural loans. POs have little access to big buyers, lack market information, do not have good negotiating skills, and cannot supply the right quantity and quality. Smallholder farmers cannot always access good quality inputs like fertilizer and seeds. They have low farming skills and limited knowledge on irrigation, post-harvest management or use of equipment.

Key constraints:

MFIs lack expertise in agri-finance, and do not have sufficient capital for lending. Farmers have limited collateral, and financial skills are low. POs are weak and lack adequate management skills. Agricultural value chains lack coordination between supply and demand. There is a limited availability of extension services, farm equipment, drying and irrigation technologies, and skills training for farmers.

Long term consequences:

MFIs cannot properly serve their clients and farmers are defaulting on inappropriate loans. POs face low sales, low prices, and do not have a strong position in the market. Their members are side-selling their crops to passing traders. Smallholder farmers have low yields, little motivation to produce high quality, and face high post-harvest losses. They have low resilience, low income and poor food security.

Solutions:

Agri-loan products and risk assessment tool development and building MFIs capacity on risk management and business planning and training of loan officers

Capacity building of POs focusing on management capacity, market access, business planning and operations, financial management, service delivery, gender.

Promoting sustainable business development services via embedded services and fee-based services, market information services, extension services, inputs supply.

Market access development through establishing market linkages, development of business models and organizing business-to-business events (B2B).

Establishing and strengthening input supply systems. We create access to inputs such as fertiliser, pesticides and seeds through B2B event and market linkages.

Capital mobilisation through international brokering for the refinancing of MFIs and savings mobilization.

Alignment with the enabling environment, and linking to partners that can strengthen the value chain around the developed products and services.

The STARS Program in a Nutshell

Partners:

Core value chain actors

- Micro finance institutions
- Producer organizations:
Cooperatives, unions, federations
- Investors and refinancers
- Big buyers and processors
- (Non-) governmental organizations (NGOs)

Chain suppliers

- Input suppliers
- Seed multipliers
- Mobile network operators
- Equipment suppliers
- Service providers
- NGOs

Market regulators

- National and local governments
- Sector platforms for price setting
- Government agencies
- Central bank

Market facilitators

- Information exchange and collaboration platforms
- NGOs
- Knowledge institutes
- Statistics office
- Consultancy services

Outcomes:

Short-term changes:

Smallholder farmers access dedicated loans for agriculture, agri-inputs such as seeds, fertilizer and chemicals, and have received skills training on quality control, price negotiation, post harvest management, agricultural and financial skills.

Farmers have access to market information and as well as access to markets for selling their crops.

Program partners work based on a sustainable business model, can access finance, have increased (risk) management capacity, knowledge of agriculture, and appetite to work with smallholder farmers.

Long-term changes:

Farmers improve their yields in quantity and quality, and farm profitability increases.

Agricultural risk assessment tools are institutionalized in MFIs, and credit risk in agri-finance is decreasing. More refinancing becomes available.

POs are able to independently establish business linkages with big buyers.

There is a take up of developed products and services in the wider market and ecosystem.

Impact:

Smallholder farmer households increase their income and food security, as well as their well-being.

Partners are inclusive to smallholder farmers and work more client-centric.

Partners grow their business by working with smallholder farmers.

Market constraints excluding smallholder farmers are addressed in sector platforms.



Thanks to the investment, her production increased to 1,200 kg. The total revenue was 420,000 Rwandan Francs (411 USD). Rose got enough money to pay back her loan, pay the school fees for her two children and secure food for the family.

Meet Rose Nyirabarihangana

Rose, a 41-year-old mother of five children, grows rice on 0.2 hectare of farm land in Muhanga District, in the Southern region of the country. She is a smallholder farmer.

Rose has been growing rice since 2008 and her production had never been above 700 kg. In 2017, Rose decided that she could do better and produce a bigger quantity, she just needed cash to invest in better inputs. She decided to join Clecam Ejo Heza micro-finance institution. This MFI is one of the partner MFIs of the STARS program.

With the support of STARS, Clecam Ejo Heza developed specific agricultural loan products suitable for smallholder farmers. Rose was able to get a loan developed under the rice value chain credit products. She got a loan of 150,000 RWF (169 USD) to be paid back at the end of the agricultural season. She invested in buying better inputs such as seeds and fertilizers and applied them as recommended by agronomists.

As a result, her production increased to 1,200 kg. The total revenue was 420,000 RWF (411 USD). Rose earned enough money to pay back her loan, pay school fees for her two children and secure food for the family.

Rose is proud of her farming: *“Look at my plot, how well maintained, I am so happy that I produced more rice, I am determined to continue improving my agricultural technics, increasing my production and increase my income. I am satisfied with the services I received from Clecam Ejo Heza as they treated me with respect and I will continue to use their services”* Rose said.

She hopes to have her family’s home repaired and have access to water near her house at the end of the next season. However, drought is still a big issue as farmers can no longer rely on the weather. She has hopes that the MFI can provide irrigation equipment in the future.

Report by ICCO Cooperation, STARS Program, 2019

Icons from the Noun Project: Household by Milinda Courey, Arrow by Aleksandr Vector, house woman by corpus delicti, Reading by Eucalyp, Man with book by Eugene Dobrik, presentation by H Alberto Gongora, business growth and safe investment by ProSymbol, farming data by Nithinan Tатаh, financial data by I Putu Kharismayadi