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 Ethiopia, with an outreach target of 66,000 smallholder farmers, STARS is working with five MFIs to develop crop specific loans. Examples of these loans include vegetable and malt barley loans that are developed to match the cost of production and seasonal needs of smallholder farmers. STARS also works with 17 producer organizations in the malt barley and potato value chains as well as with various other stakeholders to develop and strengthen the value chain in order to allow farmers to access finance, markets, inputs and agricultural skills training.
About this report

This report provides information on smallholder farmer households as actors in market systems in the Oromia region of Ethiopia.

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 are presented.

Where STARS works in Ethiopia

![Map of Ethiopia highlighting Oromia region]

- **West Shewa**: 255 households
- **West Arsi**: 510 households
- **Arsi**: 255 households

We collected data from

- **255** Households in West Shewa
- **510** Households in West Arsi
- **255** Households in Arsi
- **510** Malt Barley Smallholder Farmers
- **510** Potato Smallholder Farmers
- **8** Focus Group Discussions with 8-10 Farmers in Each Group
- **1,020** Households in Total
- **75** Female Headed Households
- **301** Households Headed by Young Farmers Under 36 Years Old
- **16** Personal Interviews

**Key:**
- **Brown** indicates West Shewa
- **Black** indicates West Arsi
- **Green** indicates Arsi

**About this report:**

- **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.

Smallholder households display a wide range in poverty levels. Over 70% of the farmers have an income above the national poverty line.

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

Many farmers have little formal schooling

- 69% of farmers either has no formal education or has attended primary education
- 32% of the households, the oldest female can read and write
- 72% of the households, the oldest male can read and write

Ownership of locally important household items

- 88% Mobile phone
- 38% Sprayer pump
- 31% Solar light and/or solar panel
- 11% Animal drawn cart
- 8% Cupboard
- 2% Motorbike
- 2% Water pump

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 Ethiopia.
Many farmers followed at least one type of skills training

- 57% of farmers followed agricultural skills training while
- 20% followed financial skills training

Training is highly valued but there is only a willingness to pay among farmers after a proven success, or the training needs to be free of charge.

— Farmers participating in the focus group discussions

Farmers indicate they want skills training in:

- Use and Repayment of individual Loans
- Technical Support to Increase Production
- Investment and Credit Management
- Savings and Financial skills

43% of households worry whether they have enough food.

15% are challenged by having an insufficient quantity of food.

The food shortage concentrates in the lean season

The peak of the lean season

The decreasing size of the symbols indicate that more farmers are experiencing food shortages. Months of Adequate Household Food Provisioning, (MAHFP).
Farmers use agricultural inputs and access markets but overall still face significant challenges affecting their yields and sales.

Mean land size that the smallholder uses for cultivation

- 2.3 ha Arsi
- 1.9 ha West Arsi
- 2.0 ha West Shewa

In addition to land, farmers also own livestock

- 98% own a cow
- 72% own a horse
- 70% own sheep
- 59% own chickens
- 39% own a donkey
- 6% own a goat
- 1% own a mule

Smallholder farmers use their crops for multiple purposes and sell their products through different channels. Home consumption remains important.

The following inputs are accessed by farmers but the level and type of access varies

- Fertilizer/ Manure
- Farm chemicals
- Transport
- Equipment
- Seeds
- Training

The percentage refers to the share of farmers of the sample, not the share of the crop going to a specific channel.
Overall, yields and sales continue to be affected by:

<table>
<thead>
<tr>
<th>Challenges</th>
<th>Main benefits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lack of good inputs due to a shortage of foreign currency causing delays in imports of fertilizer and seeds</td>
<td>Timely access to the right quality and quantity of inputs, equipment and capital is challenging. — Farmers participating in the focus group discussions</td>
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<tr>
<td>Lack of modern agricultural equipment</td>
<td></td>
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<tr>
<td>Lack of appropriate credit to invest in farm inputs</td>
<td></td>
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<tr>
<td>Climate uncertainty due to delayed rains and low temperatures, which causes crops to fail</td>
<td>“Our farming depends fully on rainfall and we sow most crops on bare land without fully knowing what will happen in the coming days.” — 55 year old farmer participating in focus group discussions in Onkolo Wabe</td>
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<tr>
<td>Crops affected by pests and diseases due to a high cost and insufficiency of agrochemicals and due to a lack of improved seeds</td>
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<tr>
<td>Price fluctuations caused by unstructured markets, political unrest and price volatility of inputs and crops</td>
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<tr>
<td>Challenges to access the market due to lack of transportation and poor road conditions</td>
<td>Access to market is particularly problematic for women and the elderly, and for farmers living far from transport links. — Farmers participating in the focus group discussions</td>
</tr>
</tbody>
</table>

The target farmers are members of producer organizations. What are the benefits and challenges related to the functioning of the producer organizations?

**Main challenges**
- Members selling to outside traders; side-selling
- Lack of storage facilities
- Capital limiting the producer organization to provide services to their members, such as marketing of crops

**Main benefits**
- Access to fertilizers and improved seeds
- Access to consumer goods
- Bulk selling
Smallholder farmers currently already access credit but the available products and services are not always suitable for their agricultural activities.

Farming offers opportunities for a good quality of life but this is dependent on access to quality inputs, access to finance and access to markets.  
— Farmers participating in the focus group discussions

Most of the farmers are optimistic about their prospects in farming

- 87% Yes
- 5% No
- 8% To some extent

Many farmers are willing to invest in their farm and take a risk

- 34% would risk losing their investment if there was a possibility of a high return
- 32% would accept some risk in return for a higher return on their investment
- 34% would accept only a low return on their investment and not take a risk

They can currently mainly focus on short-term investment

After making an investment, the farmers need to get their money back:

- 54% within one harvest cycle
- 38% within 2-4 harvest cycles
- 8% could wait longer than 4 harvest cycles

Most of the farmers do not have a large savings base, and few farmers keep financial records

- 17% Yes
- 8% To some extent
- 75% No

- 18% Yes, regularly
- 29% Yes, sometimes
- 53% No
Especially women and young people experience specific challenges in access to credit.
— Farmers participating in the focus group discussions

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.

The financial products should be suitable for the smallholders

Features that farmers find attractive in a credit product

- **Credit is meeting farmers’ actual financial needs**
- Respectful treatment from the loan officers
- Credit combined with training or farm inputs
- Farmers prefer flexible repayment options, which allow them to make repayments according to their harvest cycles and cash flow

- **Loan available for women**
- Farmers are more attracted to loans when credit appraisal is rapid, and when loans are available when farmers need to purchase inputs
- Benefits like access to inputs or access to loans at appropriate times are considered more important than interest rate

Especially women and young people experience specific challenges in access to credit

- They lack the resources and assets needed to provide security on loans, particularly access to land
- Young people and women are likely to have smaller and less powerful networks than older males, which reduces their access to information and to other value chain actors

- Women’s role in the household reduces their mobility, they have less opportunities to travel and meet others outside of their community
- Women reported to favor markets where they are surrounded by other women and do not need to physically handle large volumes of produce or large amounts of cash
### The STARS Program in a Nutshell

#### Problems:

**Immediate problems:**
- MFIs do not offer appropriate agri-loans to farmers.
- POs do not properly serve their members. They lack access to big buyers, market information, good negotiating skills and do not supply the right quantity and quality.
- The market system is dysfunctional with strong government interventions, shortage of foreign currency and middlemen limiting farmers to sell to other buyers.
- Smallholder farmers cannot access or afford quality inputs and agri-chemicals.

**Key constraints:**
- MFIs have limited expertise in agri-finance. They perceive agriculture as risky and do not have enough capital to finance agri-loans.
- POs are weak and lack adequate management and leadership skills.
- Agricultural value chains lack coordination between supply and demand. There is a limited availability of quality inputs, extension services and farm equipment.
- Farmers lack enough collateral and their skills in finance, farming and market negotiation are low.

**Long term consequences:**
- MFIs cannot properly serve farmers and they are dissatisfied with financial services.
- POs face low sales, low prices, and do not have a strong position in the market. Their members are side-selling and POs are getting financially unsustainable.
- Smallholder farmers have low yields, little motivation to produce high quality, face high post-harvest losses and they are negatively affected by market actors and money lenders. They have low resilience, low income and poor food security.

#### Solutions:

**Capacity building of MFIs** on risk management strategy, credit risk assessment tools, and training of loan officers

**Capacity building of POs** focusing on business mindset development, warehouse rehabilitation, women empowerment and access to output finance

**Establishing and strengthening a private sector-driven input supply system**, facilitating access to seeds and agro-chemicals through business to business events & market linkages

**Developing loan products and credit risk-assessment tools, refinement and integration into the MFIs operating procedures including business planning, the Management Information System, manuals and tools**

**Savings mobilization support to MFIs** based on a behavioral economics methodology

**Market access development by establishing market linkages between POs and buyers, developing business models and organizing business to business events**
The STARS Program in a Nutshell

Partners:

**Core value chain actors**
- Micro-finance Institutions
- Farmers cooperatives, unions
- Big buyers and processors

**Chain suppliers**
- Potato tissue culture developer
- Input importers and suppliers
- Seed multipliers
- Farmer Service Centers

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

**Market facilitators**
- Governmental and non-governmental organizations
- Knowledge institutes
- National statistics office
- Consultancy services

Outcomes:

**Short-term changes:**
- MFIs are able to assess agri-credit risk and have developed appropriate agri-financial products including gender aspects.
- POs are market oriented and have improved internal management and leadership capacity with gender aspects to well serve their members. The agri-input supply system is improved.
- Smallholder farmers are able to save, access appropriate agri-loans, quality inputs, storage facilities and have increased farming and post-harvest management skills. They are able to access market information and contract buyers to sell their produce.

**Long-term changes:**
- MFIs have institutionalized agri-risk assessment tools, agri-credit risk is minimized and agri-finance becomes profitable and sustainable.
- POs are able to independently establish and sustain business linkages with big buyers and improving financial sustainability.
- There is a take up of developed products and services in the wider market and ecosystem.
- Farmers improve yields in quantity and quality, and farm profitability.

**Impact:**
- POs become strong market players, MFIs grow their agricultural portfolio, sustainable business models and product innovations are scaled up and replicated.
- Partners are inclusive to smallholder farmers, work more client-centric, and grow their business.
- Market constraints that exclude smallholder farmers are addressed in sector platforms.
- Smallholder farmer households increase their income and food security, as well as their well-being.
The critical challenges to enhance the potato value chain development are the lack of a structured market and low productivity caused by the absence of high quality seeds.

- STARS program specialists

Meet Abdissa Bekele.

A 22 year old smallholder farmer who lives in Jaldu Woreda, West Shewa Zone in the Oromia Region in Ethiopia. Abdissa was unable to continue his education in higher institutions, so he decided to start growing potatoes as a business. He owns a hectare of farm land and grows potatoes on half of that land. He is a member of the Chilanko primary cooperative which is among the cooperatives supported by the STARS program to access markets, inputs and agricultural extension services.

His yield was initially between 3 and 3.5 metric tonnes for his half hectare of land. However, due to lack of quality seeds and high cost of inputs, his yield started to decline each season until it reached around 1.5 metric tonnes six years later. Selling his potatoes was also challenging as he could only sell to local traders at a low price. All this negatively affected his household income and food security. Potato plays a great role in food security in Ethiopia; this crop is harvested during the lean season from August to October and helps to reduce the shortage of food in that time.

Abdissa joined the Chilanko primary cooperative after he heard about the market linkage created by STARS with a potato processing company called Senselet Food. He was also attracted by the improved basic seeds to be made available in the near future. Senselet produces potato chips and sources the potato from Jaldu as well as other parts of the country.

On the one hand STARS partners with Senselet Food to create a market. On the other hand STARS works with farmers and their producer organizations on quality production and sorting of potatoes. As a next step after creating a market, STARS will work with other private sector actors (like Waginos, a company that produces potato plantlets) to help make the new Gudene potato variety available. Once the market access and seed availability are addressed, MFIs may be willing to develop specific credit products for potato farming, allowing farmers to invest more in their crops. This will support the creation of a sustainable potato value chain that is inclusive of smallholder farmers.

Abdissa sold his potatoes to Senselet through the Chilanko cooperative at a fair price. He is better aware of quality requirements and proud to be part of the chips bags made by Senselet. And importantly, he is optimistic about the development of a sustainable market with Senselet, despite the current absence of good potato seeds and financial services.


Icons used in this report are 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 Tatah, 'financial data' by I Putu Kharismayadi.