INTRODUCTION

The Strengthening, Consolidating and Sustaining Market Systems for Improved Sustainable Livelihoods Project (Market Systems project) in the Amhara region of northern Ethiopia improved the incomes and food security of rural families living in poverty by making sure smallholder farmers had access to the buyers and suppliers they needed to build thriving farming businesses.

The Market Systems project, which ran from 1 July 2020 to 30 April 2023, was part of the wider six-year (2017-2023) Growth for the Future programme designed by Farm Africa and partner NGOs in collaboration with the Swedish International Development Agency (Sida) to improve the profitability of people’s livelihoods in Ethiopia in an environmentally friendly way.

The main objective was to contribute to sustainable food security and livelihood improvement through developing inclusive market systems.

The project focused on achieving five interrelated outcomes:

- Strengthening market systems for agricultural inputs
- Increasing agricultural production and productivity
- Strengthening market systems for agricultural outputs
- Developing inclusive and appropriate financial products
- Improving natural resource management (NRM) through a comprehensive land husbandry (CLH) approach.

The project, which cost 22,889,193 Swedish krona (SEK), was implemented in South Wollo Zone (Tehuledere and Ambasel Districts) and Oromo Zone (Dewa Cheffa District) of Amhara National Regional State. The initiative reached 47,066 households directly and 123,666 individuals indirectly. Farm Africa served as the primary implementer while working with a consortium of partners, Mercy Corps and ORDA Ethiopia.

SUMMARY

Agricultural productivity in the region had been dwindling as farmers lacked knowledge on how to adapt their farming to more frequent droughts. The project helped farmers learn how to boost their yields by adopting climate-smart farming methods, improving their post-harvest handling of crops, and using vermicomposting techniques to produce high-quality organic fertiliser.

The farmers adopted a business-focused approach, analysing which crops were in high demand as well as developing their links to buyers. Farmers formed groups producing high-value cash crops such as mung beans, tomatoes and onions they could sell collectively. A new digital system called Farmer App gave them up-to-date access to market selling prices.

Low availability of farming inputs had also been stifling productivity. Many farmers were receiving poor value inputs from illegal vendors selling low-quality seeds, fertiliser and equipment at high prices. The project overcame this by strengthening input cooperatives and supporting three private agro-dealers to develop businesses selling high-quality inputs such as drought-tolerant crop varieties at fair prices, and supplying much needed advice on how to optimally use the inputs.

Interest-free Sharia-compliant finance opened up new opportunities for Muslims previously excluded from the loans market. The loans enabled people in Amhara to invest in new income-generating businesses both on and off farms, helping to reduce the outward migration of young people in search of job opportunities.

The rehabilitation of degraded and bare lands not only protected against floods and soil erosion, but created further opportunities for landless young people and women to earn money growing crops, fruits and vegetables.

At the end of the project, the average household dietary diversity score, which is a measure of a household’s access to a variety of foods and is also a proxy measure of a household’s socioeconomic status, had increased from 4.9 in November 2020 to 7.0 in November 2022.

INTRODUCTION

The project, which cost 22,889,193 Swedish krona (SEK), was implemented in South Wollo Zone (Tehuledere and Ambasel Districts) and Oromo Zone (Dewa Cheffa District) of Amhara National Regional State. The initiative reached 47,066 households directly and 123,666 individuals indirectly. Farm Africa served as the primary implementer while working with a consortium of partners, Mercy Corps and ORDA Ethiopia.

SUMMARY

Agricultural productivity in the region had been dwindling as farmers lacked knowledge on how to adapt their farming to more frequent droughts. The project helped farmers learn how to boost their yields by adopting climate-smart farming methods, improving their post-harvest handling of crops, and using vermicomposting techniques to produce high-quality organic fertiliser.

The farmers adopted a business-focused approach, analysing which crops were in high demand as well as developing their links to buyers. Farmers formed groups producing high-value cash crops such as mung beans, tomatoes and onions they could sell collectively. A new digital system called Farmer App gave them up-to-date access to market selling prices.

Low availability of farming inputs had also been stifling productivity. Many farmers were receiving poor value inputs from illegal vendors selling low-quality seeds, fertiliser and equipment at high prices. The project overcame this by strengthening input cooperatives and supporting three private agro-dealers to develop businesses selling high-quality inputs such as drought-tolerant crop varieties at fair prices, and supplying much needed advice on how to optimally use the inputs.

Interest-free Sharia-compliant finance opened up new opportunities for Muslims previously excluded from the loans market. The loans enabled people in Amhara to invest in new income-generating businesses both on and off farms, helping to reduce the outward migration of young people in search of job opportunities.

The rehabilitation of degraded and bare lands not only protected against floods and soil erosion, but created further opportunities for landless young people and women to earn money growing crops, fruits and vegetables.

At the end of the project, the average household dietary diversity score, which is a measure of a household’s access to a variety of foods and is also a proxy measure of a household’s socioeconomic status, had increased from 4.9 in November 2020 to 7.0 in November 2022.
INTERVENTION ONE: STRENGTHENING MARKET SYSTEMS FOR AGRICULTURAL INPUTS

Before the project intervention, the farm input supply chain was highly fragmented and poorly regulated. Although there were a few legitimate private enterprises functioning in the project area, there were many illegal dealers, especially in the supply chain of chemicals and pesticides. The supply of fertilisers was heavily regulated by the government, farmers' unions and primary cooperatives. However, the process predominantly lacked a critical examination of supply and demand of inputs, and therefore supply was not driven by demand.

Input supply dealerships primarily focused on selling their products and gave far less attention to providing advisory support to farmers, which is essential to enhancing farmers' productivity and ability to produce more. Moreover, the supply system did not consider the diverse needs and resource limitations of smallholder farmers, and disproportionately prevented women, young people and poor people from accessing appropriate inputs. A number of factors, such as distance, price, availability and quality of supplies, and gender barriers limited smallholder farmers' access to farm input supplies.

To mitigate these long-term challenges the project established and strengthened the capacity of three private agro-dealers and three input supplier multi-purpose farmers' cooperatives within the targeted districts through a cost sharing approach. With this approach, the project paid 60% of the agro-dealers' total investment costs and the agro-dealers paid 40%.

As a result, agro-dealers were able to diversify their products, and supply timely, high-quality agricultural inputs to their clients.

Many farmers have improved their knowledge and skills on the proper application of agricultural inputs as the agro-dealers model includes provision of advisory services to their clients.

A multi-stakeholder platform (MSP) established by the project created networking opportunities and coordination among stakeholders involved in marketing inputs, and facilitated lobbying with appropriate government offices to reinforce the business regulatory framework. This has reduced the number of illegal input suppliers operating.

The success of private agro-dealers depended on the clarity of their selection and engagement criteria, which included interest in the industry, professionalism, experience in agro-dealership, good references from government sector offices and willingness to invest their own money above the project cost share.

**KEY RESULTS ACHIEVED**

- The availability and variety of high-quality, timely products increased.
- The percentage of target farmers able to access agricultural inputs from local markets at the right time and in sufficient quantities increased from 54% to 70%.
- The newly established agro-dealers reported a total of 18,128 customers at the end of a short pilot project, with this number rising to 70,000 by the end of the project.
- Agro-dealers' capital increased from Ethiopian Birr (ETB) 10,500 to ETB 2,337,808.
- The volume of liquid agro-chemicals sold annually increased from 6,000 litres to 12,980 litres.
- Agro-dealers' competitiveness increased to leverage financial resources from other NGOs (ETB 340,000 was secured from SNV).

A cost-sharing investment approach enabled agro-dealers to diversify their products and supply timely, high-quality inputs to their clients.
INTERVENTION TWO: INCREASING AGRICULTURAL PRODUCTION AND PRODUCTIVITY

Farmers’ production and productivity in the targeted area were hampered due to gaps in climate-resilient agronomic practices, a lack of new farming technologies, and a lack of drought-resilient and highly productive crop varieties. This depressed productivity, combined with high production costs, had dramatically reduced farmers’ return-on-investment ratios, as measured by average net return per hectare. Furthermore, the agricultural extension system had gaps in the market-oriented production system, and farmers lacked the ability to critically analyse when buyers would demand products and their quality specifications, and other factors that are key in enhancing the productivity and marketability of their products. The project implemented a simple approach making use of cost-effective technology, which significantly improved farmers’ knowledge, practices and productivity, while also having a positive impact on the environment. The project promoted comprehensive agronomic practices that integrated:

- cluster farming (a system that groups neighbouring farmers to collectively produce market-oriented products) for the chosen products (onions, tomatoes and mung bean seeds).
- the production of organic fertiliser.
- the introduction of basic post-harvest technology.

The project successfully established six cluster farmers’ groups known as Production and Marketing Groups (PMGs), which each produce high-quality vegetables and mung beans that meet the end users’ specifications.

The project supported five farmers to establish vermi-compost multiplication centres, and supported 247 farmers (of whom 27 were female) to produce vermi-compost in their backyards. This technology enhanced productivity while reducing production costs by decreasing dependency on chemical fertilisers, the price of which has recently risen rapidly.

Improved agricultural practices and storage facilities enabled smallholder farmers to increase the quality and shelf life of their produce, which enhanced their bargaining power and ability to respond to market demand. For example, the ability to keep onions fresh for longer after harvest by storing them on racks in newly constructed sheds has given farmers more choice about when to sell their produce, meaning they can time their sales for when prices are higher. Many farmers were able to build the storage sheds because they were simple and cheap to build using locally available materials.

KEY RESULTS ACHIEVED

As a result of the introduction of different agricultural technologies and practices, farmers were able to achieve significant improvements in productivity and average net profit for their chosen cluster farming crops, as shown in the table below.

This integrated approach has the potential to effect wide-scale impact in boosting agricultural productivity and farmers’ incomes if replicated with larger groups of farmers. More farmers are already adopting the technology and the government has replicated the approach in adjacent districts.

Increase in productivity
average quintals (1,000kg) per hectare

<table>
<thead>
<tr>
<th>crop</th>
<th>project start</th>
<th>project completion</th>
</tr>
</thead>
<tbody>
<tr>
<td>onions</td>
<td>81</td>
<td>115</td>
</tr>
<tr>
<td>tomatoes</td>
<td>93</td>
<td>151</td>
</tr>
<tr>
<td>mung beans</td>
<td>15.2</td>
<td>8</td>
</tr>
</tbody>
</table>

Increase in net profit
average Ethiopian birr per hectare

<table>
<thead>
<tr>
<th>crop</th>
<th>project start</th>
<th>project completion</th>
</tr>
</thead>
<tbody>
<tr>
<td>onions</td>
<td>72,709</td>
<td>201,891</td>
</tr>
<tr>
<td>tomatoes</td>
<td>93,207</td>
<td>262,304</td>
</tr>
<tr>
<td>mung beans</td>
<td>1,7792</td>
<td>72,709</td>
</tr>
</tbody>
</table>
INTERVENTION THREE:
STRENGTHENING MARKET SYSTEMS FOR AGRICULTURAL OUTPUTS

Investing in financing agricultural inputs and improving agronomic practices to boost productivity alone cannot bring about long-term increases in smallholder farmers’ incomes. Unless the market for agricultural outputs functions well, farmers’ ability to benefit from the sale of their agricultural commodities will remain low.

Project activities to promote a well-functioning market system have been key to maximising the benefits farmers have been able to realise from the overall project. Developing a well-functioning market has depended on building trust between producers and market actors as well as enhancing the producers’ capacity to analyse production costs and profit margins, which has been decisive in establishing supply and demand equilibrium and increasing the farmers’ profit.

KEY RESULTS ACHIEVED

➢ To stimulate well-functioning market linkages, the project invested in infrastructure such as the construction of modern shades for fruit and vegetable market stalls and a mung bean aggregation centre, which help farmers to sell their produce at good prices instead of incurring further costs in transporting the produce back home.

➢ A digital market information system has enabled around 1,300 farmers to receive market information using mobile SMS, which has helped them to make informed decisions about where and when to sell their agricultural produce.

➢ Through Production and Marketing Groups, smallholder farmers are directly linked to the end market users, reducing the need for intermediaries and brokers. The project established a space where farmers and sector government agencies can identify and discuss market challenges and potentially come up with solutions to ensure that smallholder farmers benefit from the market.

INTERVENTION FOUR:
DEVELOPING INCLUSIVE AND APPROPRIATE FINANCIAL PRODUCTS

Access to finance is key to ensuring farmers are able to invest in their businesses. However, many farmers are excluded from access to finance due to cultural and religious beliefs that prevent them from taking out loans with interest applied. Shariah-compliant financial service provision was almost non-existent in the area before the start of the project.

To ensure that no one was left behind and that gaps in agricultural financing did not have negative impacts on agricultural production and productivity, the project prioritised the development of inclusive financial products to support agricultural input and output financing. Based on consultation with the community and influential leaders, the project developed an inclusive, low capital-intensive financing model that is easy to implement, replicate, scale up and sustain.

KEY RESULTS ACHIEVED

➢ 19 interest-free loan kiosks were established both within and outside of the project operation area woreda.

➢ 7,947 smallholder farmers accessed financial services introduced by the project. Prior to the project starting, just four farmers had access to financial services.

➢ Total savings increased to 547,706,662 ETB from 4,684,788 ETB at the start of the project.

➢ Financing of smallholder farmers’ marketing increased to 109,945,031 ETB from 603,530 ETB.

➢ Tsedey Bank / ACSI financed the purchase of 12 tractors for clients through an interest-free finance system in the Oromo Zone.

Access to finance has enabled smallholder farmers to invest in key assets such as machinery.

“Before we were able to access market information via SMS we simply sold our products at the price offered to us.”

Mohammed Abdu
INTERVENTION FIVE: IMPROVING NATURAL RESOURCE MANAGEMENT

Across the project area, much of the land that used to be green and fertile had degenerated into dry and barren land. In order to both boost the productivity of smallholder farmers and protect the environment, the project promoted improved natural resource management using a comprehensive land husbandry (CLH) approach based in watershed management. The approach brought communities and government stakeholders together to rehabilitate the land and increase the fertility of soil in the watershed.

By giving unemployed young people permanent ownership of plots of land on degraded hillsides and training them in how to rehabilitate the land by building terraces and planting fruit trees, forage trees and vegetables, the project created livelihood opportunities and boosted agricultural productivity while protecting the natural environment.

This practice required low-capacity investment, yet it ensured youth land ownership and brought about multiple advantages for the environment, youth livelihoods and the productivity of farmers in the lower water catchment areas. The terraces also offer farmland protection against flooding.

KEY RESULTS ACHIEVED

- 54 members of three youth groups engaged in livelihood development through participation in watershed management.
- 792.5 hectares of land are now covered under comprehensive land husbandry, of which 93 hectares are cultivated land, and 13 hectares are covered by bushes and grasses.
- 71.5% of households now use renewable energy, mainly (95%) for lighting.

Unemployed young people were given ownership of land on degraded hillsides and taught how to rehabilitate it by building terraces.

photos: Climax Studio
Farm Africa Ethiopia

Gurd Shola, Ethio-Ceramics Bldg
5th floor (Near Century Mall)
Addis Ababa, Ethiopia
PO Box: 5746

Telephone: +251 115 573 325
Telephone: +251 115 573 313
Fax: +251 115 573 332

E-mail: ethinfo@farmafrica.org

ACSO registered charity no 0689 (Ethiopia)