



CASE STUDY REPORT

STRENGTHENING LOCAL MALT BARLEY SUPPLY CHAINS IN ETHIOPIA

IFC – ALP-SCOPEINSIGHT ASSESSMENT TOOLS
IMPLEMENTATION IN ETHIOPIA

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CASE STUDY PROFILE

PROJECT: Strengthening Local Malt Barley Supply Chains in Ethiopia

IMPLEMENTER: IFC and Heineken

PARTNERS: AMEA, SCOPEinsight, Precise Consult, EUCORD

FUNDERS: Heineken and IFC

GEOGRAPHY OF INTERVENTION: Primarily 6 zones in the Oromia region, Ethiopia: Arsi, West Arsi, Bale, West Shewa, Southwest Shewa and North Shewa. Piloting in East Wollega, Oromia, and 2 zones in Amhara: North and South Gondar

OBJECTIVE: The project objective was to increase Heineken's local sourcing of malt barley through four components:

- 1 Increasing productivity of Ethiopian malt barley
- 2 Enhancing the business skills of aggregators by using SCOPEinsight and ALP tools
- 3 Facilitating input and output financing for farmers and aggregators
- 4 Increasing the price competitiveness of Ethiopian malt barley

Number of beneficiaries: 39 coops, 23 model farmers and 14 unions participated in the Programme

Reach: 40,000 smallholder farmers through nearly 80 coops, unions and model farmers, who all serve an aggregation function (all malt barley value chain)

AMEA Tools implemented:

- IFC's Agribusiness Leadership Programme (ALP) – Foundations of Cooperative Management
- SCOPEinsight's SCOPE Basic and SCOPE Pro

IFC, HEINEKEN ETHIOPIA, AND PROJECT PARTNERS

The International Finance Corporation (IFC) is a sister organization of the World Bank and member of the World Bank Group. IFC is the largest global development institution focused on the private sector in developing countries and leverages their products and services to create markets that address development challenges. IFC applies financial resources, technical expertise, global experience, and innovative thinking to help their clients and partners overcome financial, operational, and other challenges.

IFC's Agribusiness unit combines investments and advisory services to help the sector meet growing demand in an environmentally sustainable and socially inclusive way. In Ethiopia, IFC's agribusiness projects target value chains of strategic interest to the country such as barley, maize, soy, sesame, horticulture, apiculture, livestock and livestock feed. The interventions aim to increase the productivity and incomes of smallholder farmers, improve the quality and volume of agricultural produce, raise aggregators' level of business management professionalism, and improve food security and support climate smart agriculture.

Heineken International (Heineken N.V.) is a Dutch brewing company founded in 1864. Heineken owns over 160 breweries in more than 70 countries. In Ethiopia, Heineken started operations in 2011 by procuring Bedele and Harar breweries from the Ethiopian government. Heineken inaugurated its third brewery, Kilinto, in 2015. Kilinto is Ethiopia's biggest brewery.

This partnership was designed leveraging Heineken's previous experience in supply chains in Ethiopia. Particularly, the first phase of a project in partnership with the Dutch government (CREATE – Community Revenue Enhancement through Agricultural Extension). The CREATE I project (2013-2017) had been successful regarding the agronomy aspects of malt barley production, as Heineken introduced a new high yield variety to Ethiopia. IFC joined for the second phase (CREATE II, 2018-2019) when the Dutch Embassy exited from the cooperation with Heineken.

Originally, Heineken started working with EUCORD (2013) and government stakeholders. IFC came into the picture as a co-financier in 2018 to support Heineken to fill the gaps in the second phase of the project. Additionally, service providers for the agronomy support and business professionalism assessment and training of aggregators were selected through a bidding process that took into account their previous experience and capacity. This project is therefore a continuation of an existing cooperation and focusing on aspects beyond just agronomy. The project aimed to fill, among others, the gaps in contract honouring, marketing, financial management, and record keeping to aggregators – key partners for the commercial sourcing of raw materials of farmers and farmer organizations.

This partnership introduced IFC's Agribusiness Leadership Program (ALP) for the first time in Ethiopia. Precise Consult, a local consultancy firm, was recruited to implement ALP training.

PROJECT BACKGROUND AND OBJECTIVES

Ethiopia has great potential for malt barley production. Malt barley grows best at altitudes ranging from 2300 to 3000 meters above sea level. It requires uniform rainfall distribution of 500-800 mm during the crop growing season and well-drained soil. Barley is the fifth most important cereal crop in Ethiopia after teff, maize, wheat and sorghum and the government is keen to boost production of malt barley by appropriately supporting smallholder farmers and attracting commercial farming.

Despite its potential and importance given by policy-makers, malt barley yield was low (2.4. MT/ha) and did not meet national demand. To compound the challenge, domestic prices for malt barley are not competitive if compared with imported malt barley (French, for example). Consequently, all breweries had to import most, if not all, of the malt they needed.

IFC and Heineken partnered to tackle these challenges. **The objectives of the project was to increase Heineken's local sourcing of malt barley.** This was to be achieved through four interconnected components:

1 Increasing productivity of farmers

2 Enhancing the business skills (professionalism) of aggregators by using SCOPEinsight and ALP tools

3 Facilitating input and output financing for farmers and aggregators

4 Increasing the price competitiveness of Ethiopian malt barley to achieve price parity with French malt barley

SELECTION PROCESS OF FARMER ORGANIZATIONS AND LEARNERS

A total of 40,152 farmers benefited from the project directly and over 50,000 farmers benefited indirectly. Direct beneficiaries were farmers who were targeted directly through contract farming arrangements and were supplied with the full package which included training targeted to their needs, Heineken Ethiopia's own high-yielding seed variety (called "Traveller", or known locally as "Walia") and other inputs at cost-recovery. Farmers were also guaranteed offtake of the production (market access).

Indirect beneficiaries were those farmers living close by to direct beneficiaries and that were able to copy the technology and to use the high yielding variety of seeds (which farmers multiply themselves).

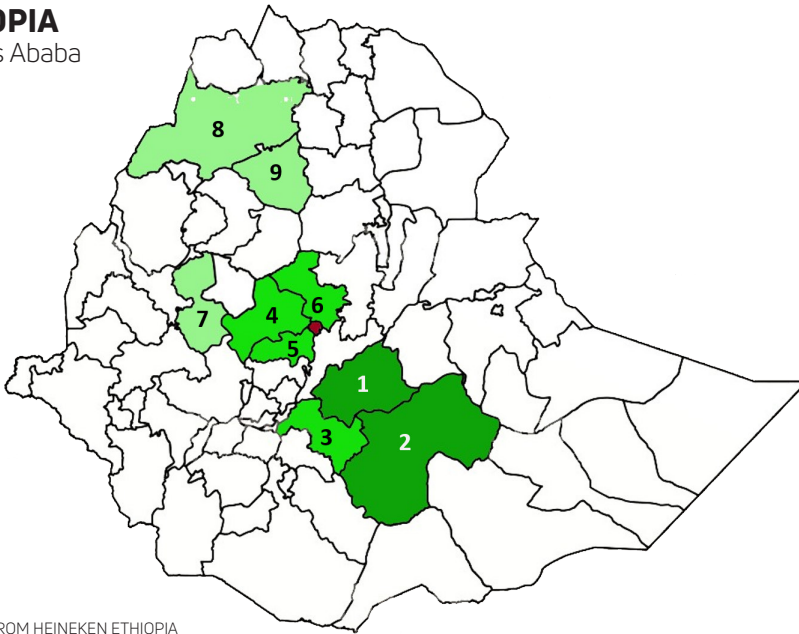
The number of direct beneficiaries far exceeds the project's initial plans, which were to include 20,000 farmers in the first phase.

The criteria for farmer selection included suitability of the area where farmer organizations were located and land size owned by the farmers. Farmers had to own enough land to be able to produce surplus for the market. Average landholding in the barley growing area is about 3 ha/farmer and a farmer had to allocate at least 0.75 ha – 1ha on average for malt barley production. Farmers selected were also expected to already have some capacity to produce barley commercially. Experience (tracking history of trading grains) was needed, as well as access to a warehouse and willingness to participate in the project.

In summary, the base for farmers and aggregator selection was their location, existing capacities and experience and willingness to engage in malt barley value chain. While farmers and aggregators in all project areas received improved seed and agronomy training, more mature malt barley growers and suppliers were targeted for business professionalism capacity building. These were mostly concentrated in the Arsi and Bale zones in Oromia.

ETHIOPIA

■ Addis Ababa



ADAPTED FROM HEINEKEN ETHIOPIA

OROMIA REGION

1. Arsi
2. Bale
3. W. Arsi
4. W. Shewa
5. S.W. Shewa
6. N. Shewa

AMHARA REGION

1. E. Wollega
2. N. Gondar
3. S. Gondar

ALP AND SCOPE TOOLS IMPLEMENTATION

This project was designed following the AMEA Framework approach towards capacity development which entails:

- 1 Initial assessments of malt barley aggregators to identify gaps in their capacities
- 2 Training and coaching sessions adapted to the gaps identified by the initial assessments
- 3 Reassessments to capture the increase in the professionalism of the aggregators involved

The initial assessments of the farmer organizations were carried out by certified SCOPE assessors from ICCO. The baseline assessments highlighted significant weaknesses in four of the eight dimensions of professionalism (as measured by the SCOPE Basic Assessments). The project also measured the strengths and weaknesses of model farmers (using the SCOPE Agent) and found that they needed training in the production base dimension.

Using the results from these assessments, the project chose the Agribusiness Leadership Program (ALP) curriculum – Foundations of Cooperative Management. The FOs (cooperatives), unions and model farmers are called aggregators in the project, due to their role of aggregating malt barley from farmers. Reassessments for FOs and aggregators

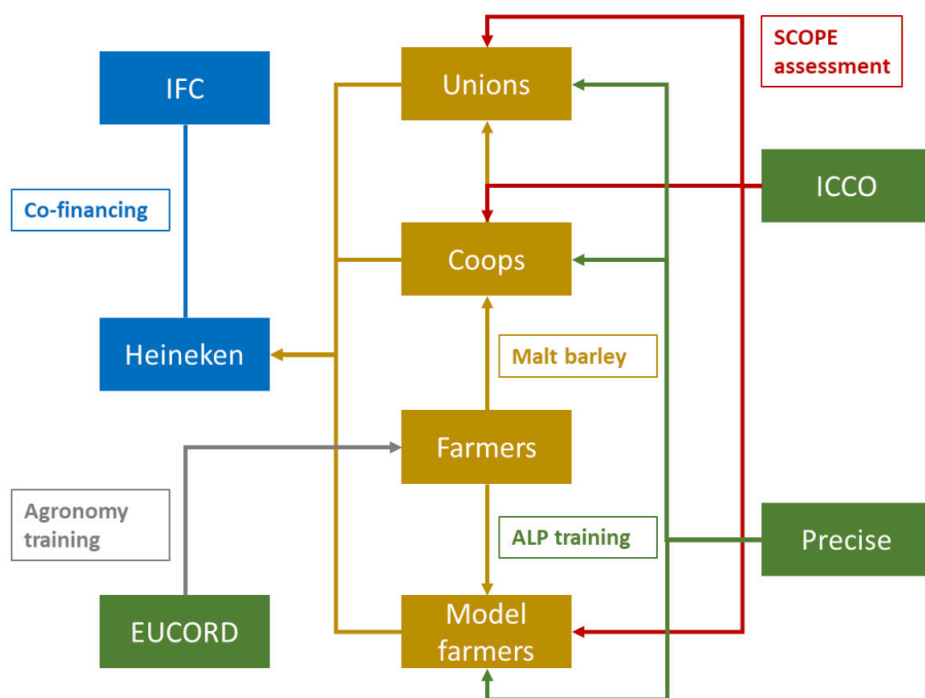
were postponed due to COVID-19 restrictions, but have recently been undertaken. An IFC cooperative subject matter expert and instructional designer selected and customized modules from ALP that were relevant to model farmers. Modules were translated and training was delivered in the local languages of Afan Oromo.

There was also technical training, including agronomy support for improved seed introduction and use of crop protection products. EUCORD, a Dutch/Belgian NGO that was involved in the first phase of the project, conducted the agronomy training. EUCORD used a cluster approach in line with the government's Agricultural Commercialization Clusters program. This allowed farmers who have adjacent plots to farm and manage their crops together, enabling better access to mechanization, such as combine harvesters.

Innovative ICT tools were also used, mostly because of COVID-19 and as a result of the social unrest in some regions that made it difficult to arrange in-person training. IFC made use of radio to reinforce agronomy trainings and reach a larger number of trainers in a cost-effective way. Another innovation was in the finance component, by piloting a digital payment system with five model farmers.

The graphic on the right shows the different roles of IFC, ICCO, SCOPEinsight, EUCORD and Precise Consult, as explained above:

The project was completed in early 2020. End-line surveys were delayed due to COVID-19 lockdown measures, but will be completed in January 2021.



RESULTS

PRODUCTIVITY AND ACCESS TO FINANCE

The outputs of the project were that the FOs were assessed and 39 cooperatives, 23 model farmers and 14 unions received tailored training and coaching (148 coop members and 78 union members participated).

IFC and Heineken consider themselves successful in achieving their main objective to increase Heineken’s local sourcing of malt barley. Heineken significantly increased their local sourcing from 5,000MT in 2017/18 (baseline), to 19,000MT or 13% of total production in 2018/19, and 15,000MT or 10% of total production in 2019/20.

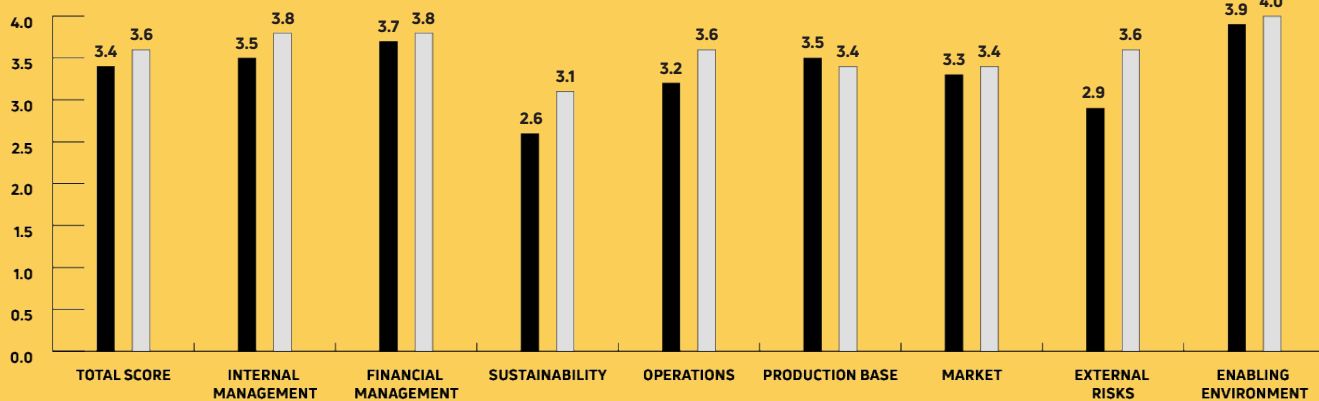
This was in part due to the first component of the project – to increase productivity – that succeeded by more than doubling the yield of malt barley.

The yield went from 2.4 MT/ha to 5.2 MT/ha. Agronomy trainings in the first and second phase of the project strongly contributed to this result and were complemented in the second phase by ALP’s trainings in managerial and organizational skills of the FO leaders, model farmers, and unions. The project was also successful in providing model farmers with a sustainable business case. The SCOPE reassessments demonstrated that the assessed aggregators registered 11% growth in their professionalism scores, with slightly more than three quarters of the aggregators scoring higher than 3.5 (out of 5.0). Most progress was made in External Risks (awareness and mitigation), Operations (processing, storage, logistics, and technology), and Sustainability (social and environmental issues). A 3.5 SCOPE score indicates a reasonable level of business management capabilities.

Source: courtesy of SCOPEinsight

Average Scores of All Organizations

What are the average scores of Assesseees by dimension?



In terms of access to finance – the third component of the project’s objective – the trainings resulted in the **facilitation of USD 1.8 million in short-term financing** mobilized through local MFIs for the input-side of production (seeds, fertilizers, and agrochemicals). The project facilitated short-term credit for inputs through offtake contracts from Heineken, and creating linkages with three MFIs, to whom Heineken provided a limited guarantee on loans to supplier farmers. Local MFIs provided loans to farmer groups with a group guarantee, without requiring collateral. Those loans were paid directly to Heineken or the farmers groups and **went to an estimated 29,000 farmers**. Groups were required to buy improved seeds directly from Heineken. Moreover, the digital payment system piloted with a few of the model farmers reduced the defaults in payments to virtually 0% (and from usually 2 to 3 weeks delay to no delay) and contributed to reduced side-selling among those receiving loans. Side-selling remains a challenge in the malt barley sector, as contracts are difficult to be enforced and require investment in building strong relations with aggregators. Informal relations are as important as (if not more than) formal relations.

Finally, the project produced an extra 90,000 MT of barley, far more than Heineken needed (24,000 MT). The rest of the production went to the domestic food market, (equalling an estimated USD 60 million in value) and contributed towards local food security. This also means that the project contributed to import substitution and foreign exchange savings, which links to the government’s strategy of import substitution. However, this fourth component was only partially successful, as European prices for malt barley are still more competitive than Ethiopian malt barley. The price setting mechanism of the Ethiopian government results in a price signal for farmers (not yet including transportation and other additional costs) that is already more expensive than the international price. In the end, Ethiopian malt barley prices remain 30% more expensive than European malt barley.

IMPROVEMENT ON THE BUSINESS MODEL AND UNINTENDED OUTCOMES

Based on coaching reports, 70 of 76 aggregators (92% of total) have implemented the recommended changes from the ALP (the remaining aggregators have not provided data on adoption of practices recommended during the training). This project was also the first time the implementers introduced the model farmer-based aggregator model in Ethiopia. Model farmers also served as the project’s extension agents and exchanged knowledge and experience with the farmers in the project. Overall, the project contributed to provide aggregators (including FOs) with a more client-centric business case, improving the volume and quality of supply. ALP has played a significant role, as FO leadership noticed tangible benefits in terms of skills enhancement.

Improvements include:

- Improved recording/bookkeeping and data management of aggregators
- Enhanced business skills: leadership is better prepared to realize cost savings decisions. Besides this, leadership has a more client centric approach, and volume and quality of supply has increased
- Enhanced skills of mobilizing working capital and cash management: loans from MFIs are readily available, as mentioned, and suppliers are providing more grain in-kind. Regular financial checks/audits are realized, FOs are disclosing dividends, and preparing monthly ledgers on time
- Enhanced awareness and skills on the need for business plan preparation and implementation
- Enhanced networking capacity and proactivity of aggregators: linkages with government offices, financial institutions, input suppliers, etc., without waiting for partners to take the lead

Less tangible benefits were also realized, such as:

- Increased reliability between value chain partners, as the enhanced frequency of contacts between trainers and aggregators built up confidence and transparency
- A sense of positive competition among aggregators, resulting in a very high rate of completion of training assignments

Other unintended but positive outcomes of the project include the increased awareness and actions taken to increase women in membership and leadership positions, and the cascading of the trainings to FOs' constituency, which enhanced the capacity of over 40,000 FO members – as mentioned before. There were also spillover benefits for an additional 50,000 farmers who learned from beneficiary farmers and were able to use improved seeds.

IFC's partnership in the second phase of the project had a great influence in the observed results, as IFC invested in the programme and covered most of the advisory work through a cost-sharing modality.

LESSONS LEARNED

LESSONS FOR THE ONGOING IFC/HEINEKEN PROJECT

- The ALP training session is lengthy and could be broken into two or more sessions, with timing of the sessions taking into account the time trainees must invest in the barley growing seasons.
- Only 41 of the 76 aggregators participated 100% in the intervention; others dropped out midway and were replaced. Refresher ALP trainings could be provided to include those who drop out after training starts. This could be once a year and focus on best lessons and challenges, and be combined with field visits to a successful aggregator for practical learning.
- Government buy-in: Government buy-in is necessary to transition to systems in which sustainability is created by the stakeholders involved. Besides, where government participation is still very prominent, government representatives, such as extension workers or staff from the woreda [district] Cooperative Promotion Agency or Bureau of Agriculture, should be included in training to provide some post-training support.
- More women aggregators and members of FOs should be integrated into the malt barley value chain.

LESSONS FOR THE AMEA TOOLS

ASSESSMENTS

Feedback from master trainers, local trainers, and Heineken point out that the use of assessment tools is a significant investment of time and resources

- One assessment takes on average 6 hours. With 80 aggregators, this is manageable but to scale it up to 1,000 aggregators, for example, time investment becomes a problem. In Uganda, AMEA is contributing to the development of the SCOPE Rapid Assessment tool which can help preselect large numbers of aggregators, making the decision to spend more time on a selection economically more substantiated
- The assessment process consumes a significant amount of the budget (per diem for assessors and associated travel costs). SCOPEinsight along with several AMEA members are looking at

The project did not involve the Cooperative Promotion Agency (CPA), which does its own assessment. FOs may receive different results from the CPA and the SCOPEinsight assessment, which may be confusing to farmers and dissuade them from accepting the SCOPE results. The CPA also has its own audit standards, which may not align with the audit tools provided in the ALP financial module

Trainers should be better informed about trainees' assessments results, and the results should be well communicated to farmers. There were gaps mentioned in the SCOPE assessments that were questioned by the farmers, which trainers were unable to answer. The communication between assessors, trainers, and trainees should be strengthened

ways to reduce the costs of field assessments by piloting remote assessment approaches

- While the assessments do take time, the benefit of having aggregators who are more market responsive and more reliable business partners is compelling. Monetizing these benefits could justify putting in the time investment
- The time invested in the assessment process is critical as it is designed to inform program design, specifically capacity building approaches. The results of the assessment help design more effective capacity building approaches which lowers the cost of that part of the project.
- Finally, the training of the ALP trainer and certified SCOPE Assessors provides an infrastructure which can be used by other stakeholders and eliminates these investments for future projects making them much more cost effective than they otherwise would have been.

- AMEA could play a role here by contributing to the adoption of standardized assessment, training, and coaching tools that align with CPA priorities for FO development. CPAs, and their overseeing body, FCA could be engaged to co-develop a multi-stakeholder approach that streamlines FO capacity building by facilitating regular communication between actors, developing a pool of qualified BDS providers, and establishing an M&E system

- The best practice is that the SCOPE assessment results are fed back to the farmer organizations. This is an essential first step as this is the beginning of the empowerment of the farmer organizations. It is built in as a first step in the ALP
- Trainers are expected to explain the reasoning behind the SCOPE scores to farmer organizations as part of the ALP training

TRAINING AND COACHING

Partners need to invest in finding solutions to institutionalize the SCOPE assessment and ALP modules for farmers and FOs within the FOs and unions. The issue of turnover in FOs can be crucial for the relay of knowledge

- The intention of training FO leadership is to institutionalize the knowledge, but they do not always take responsibility for passing it on

Competition among trainees had a positive influence in completion of training sessions.

Farmers could serve as trainers in some courses as they are more likely to listen to each other than to outsiders. Best performing farmers could serve as trainers and keynote speakers, or demonstrate changes and improvements in practice

Farmers have their own work-related and social events that can disrupt their availability and the schedule of trainings. Weddings, funerals, illness, and mandatory government meetings can cause farmers to miss training as social cohesion within the community is very strong

- Institutionalization of know-how passed on by trainings could prove an asset to the FOs, as some individuals who are trained eventually leave the organizations, and the knowledge they brought is gone with them
- Ensure that the training materials are filed in the office. This is specifically important for FOs and unions since there is high turnover of staff and committee
- An award system to create competition among trainees as an additional short-term motivation factor should be considered
- This would also likely increase the dissemination of know-how with farmers not involved in the project directly
- Coaching in peer groups is intended to serve a similar purpose, as FOs take turns hosting the coaching sessions
- Flexibility and careful planning to avoid agricultural activities in offering the ALP is required

LESSONS ON COST-EFFECTIVENESS

Heineken found the use of AMEA tools to be generally cost-effective, as it followed a cascading approach that enabled them to reach a large number of farmers. ALP is cost-effective because it is scalable and has been scaled to other areas together with agronomic training with EUCORD where training was needed beyond this project.

- The project spent a total of \$900,000 on strengthening the malt barley supply chain. For agronomy trainings to 40,152 farmers, the project allocated \$500,000, or \$13.60 per farmer. For business skills training for 80 aggregators, the spending was \$350,000, or \$4,375 per aggregator
- It is not clear, however, whether Heineken would be able/willing to incorporate these costs into its business model, especially given that Ethiopian barley remains uncompetitive on the international market

Sustainability and scalability of the project: when training is reinforced with coaching and post-training follow-ups, it maximizes the percolation of knowledge and skill to the trainees. Training farmer representatives means that support for farmers and their institutions is readily available, even if the project phased out. However, the high turnover in farmer organizations remains an untackled issue

CONCLUSIONS

IFC and Heineken Ethiopia engaged in a partnership to build upon the initial success of the CREATE I project. In the second phase of the project, Heineken took a lead in piloting IFC's ALP - SCOPE insight's SCOPE tools in Ethiopia. This has proven very effective in terms of achieving the project's objectives and generating positive spillovers.

Heineken is happy with the results of the trainings and admits there is a high likelihood of using AMEA tools for upcoming projects. Most likely, the trainings will take a simpler form adapted from insights by FO assessments, as they want to apply just the key areas where they need to know the capacity gaps, not the whole package.

Through this project, we were also able to extract some relevant lessons, as for example the need to align with governmental bodies that have a significant influence in the agricultural cooperatives sector, such as the case of the Cooperative Promotion Agency in Ethiopia.

Additionally, it seems that the institutionalization of trainings to FOs has a great appeal with Heineken and partners. The objective being not to lose knowledge based on human resources leaving for other opportunities.

A few questions still remain. Will the approach be integrated into Heineken's normal business operations? Or was it a one-off project? Also, how can the ecosystem incentivize a sustainable market for service providers such as trainers and coaches? Naturally, trainers and coaches should prove themselves to the farmers. Their input should bring additional money to farmers' pockets. Otherwise, farmers are reluctant to pay for training and coaching services. Alternatively, it seems possible to create a push factor from the buyer's side. A buyer could perhaps be convinced to use training as a criterion to select aggregators.

Besides the positive spillover effects to 50,000 farmers, the ALP curriculum went on to be used in four additional projects in Ethiopia. Perhaps most importantly, the Heineken project has provided proof of concept for local supply chain development that led on to additional IFC developments.

AMEA hopes to see more projects such as this developing in the coming years and encouraging ever more partners in the public and private sector to integrate the approach into their normal business operations.