Ethiopia coffee quality improvement project
ETHIOPIA COFFEE QUALITY IMPROVEMENT PROJECT

AID FOR TRADE GLOBAL REVIEW 2011: CASE STORY
EXECUTIVE SUMMARY

This case story describes two main lessons from a coffee project in Ethiopia which involved setting up seven quality laboratories in rural areas.

A key opportunity to increase revenue from coffee exports is through quality improvements. However, the smallholder farmers of Ethiopia – who produce the bulk of the country’s coffee – in the past have generally received virtually no information on the strengths and flaws of their coffee, and therefore also had little orientation for improving quality. The Ethiopian Coffee Quality Improvement Project, implemented by the Ministry of Agriculture and Rural Development of Ethiopia with the assistance of the International Trade Centre (ITC), intended to tackle this “information gap” on quality by building a network of rural coffee-quality assessment laboratories.

The first lesson is that international buyers are a key resource in the design of Aid for Trade projects. Buyers often have long-term experience in a sector, the ability to compare national sectors across countries and strong working relationships with national producers and government institutions. Donors and agencies will likely get a quick and good indication of what needs to be done to develop exports in a given country and sector by simply querying the buyers.

The second lesson from this project is that the form of aid must be adapted to the national partners’ capacities. Given that the capacities of national public institutions to implement projects and manage financial resources are often inherently weak in developing countries, aid in the form of grants to ministries is particularly subject to risks. In order to ensure that the expected impacts on the target-groups are realized, sufficiently strong institutional capacities, as well as contiguous and continued support in project implementation and financial management, may be preconditions for grant allocations. This lesson is more generic and not only relevant for Aid for Trade projects.

The experience of this Aid-for-Trade project also serves to highlight a number of common difficulties, including restructurings within partner organizations and unanticipated personnel and institutional changes. These complications caused delays in the project implementation and mitigated the expected impacts. The case story also describes factors that allowed the project to successfully meet its objective of establishing seven coffee quality-testing laboratories in rural Ethiopia, notably the strong national political backing and the complementary support from other donors.
ISSUES ADDRESSED

**Quality** is a determining factor in the price of coffee beans. In fact, in Ethiopia the quality of a batch of coffee beans (referred to as a “lot” by the people in the business) establishes whether it can be exported or must be sold locally. Moreover, quality defines whether the lot will be bought at a standard commodity price or may acquire a “specialty” price which is much higher. The factors that determine quality are numerous, yet in a coffee bean’s entire journey from the field to the final drinking-cup, quality is foremost made (or lost!) at the farm level – notably during the initial post-harvest treatment of the coffee cherries by the farmers. Considering this fact, it is also important to note that over one million small-scale coffee farming households produce about 90% of Ethiopia’s coffee. In other words, these numerous farmers scattered over the Ethiopian highlands essentially determine the quality – and hence the worth – of the country’s number one source of export revenues. Until today, however, the Ethiopian coffee farmers had virtually no information regarding the quality of the beans they produced, nor much information on what “good” quality coffee is and how to obtain it. A separate problem is that those who have received information often lack the resources for quality improvement.

Until 2009 the majority of the coffee produced in Ethiopia (with exception of the coffee from the Harar region) was tested for quality in the main national coffee “cupping” laboratory in Addis Ababa – several days drive away from some of the major coffee producing areas. Not only was this facility often backlogged during the peak harvest season creating weeklong delays, but the results of the analyses hardly ever reached the producers in the field. Without information on the strengths and flaws of their coffee, the farmers could also not improve their product. The project aimed to tackle this “information gap” that was penalizing farmers and stalling quality amelioration.

Increasing quality awareness became all the more crucial when the project started in 2004 because the EU Commission was defining standard regulations for soluble and roasted coffee on the maximum permissible levels of OTA Ochratoxin, a toxin produced by fungi in coffee that is not properly dried or stored after harvest. The natural or “unwashed” coffee mainly produced in Ethiopia’s highlands is especially susceptible to these fungi. Thus, in order to prepare the national coffee sector to meet EU regulations it was critical to develop quality control and advisory services geared towards those who perform the initial drying and storing of coffee beans: the farmers.

OBJECTIVES PURSUED

The overall objective was to contribute to **improvement of the quality of coffee produced in Ethiopia** through quality awareness on the local level. This would be done by establishment of laboratories in the Western and Southern part of Ethiopia providing quality control services and training to farmers and traders. The program aimed at (i) empowering producers with knowledge over their product as well as (ii) securing the earnings of national businesses involved in trading, processing and exporting coffee by increasing the proportion of coffee reaching export quality. Supplementary objectives of the program were (iii) to increase the percentage of coffee with potential for sale as a higher grade or specialty coffee by discouraging the mixing of different coffees and facilitating traceability, and (iv) to speed up the export process by reducing the congestion at the main quality-testing laboratory in Addis Ababa. At times more than 400 trucks waited for days during peak season.

PROJECT DESIGN AND IMPLEMENTATION

In a simple round of telephone calls from ITC in 2003 a handful of coffee importers independently suggested local coffee quality-testing facilities as a priority for the sector. At the same time the creation of decentralized laboratories in order to provide quality assessment services locally was also a part of the Prime Minister’s **Master Plan for Coffee Development and Marketing** (October 2003) – i.e. the same approach from two sides.

The design of the project was further developed in early 2004 through a dialogue between ITC, the Coffee and Tea Authority (CTA) and the Cupping and Liquoring Unit (CLU) of the Ministry of Agriculture and Rural Development (MoARD). The partners decided to build and equip seven coffee “cupping” laboratories throughout the major coffee producing regions, and to train 21 persons in the techniques of coffee quality analysis, also called “cupping.” The activities were complementary to those of past and ongoing projects, including the much larger **Coffee Improvement Programme** financed by the EU and anterior projects financed by the Swiss Government.
In line with the objectives of the Paris Declaration on Aid Effectiveness to foster national ownership, the Ministry was largely responsible for the implementation. ITC provided assistance from Geneva and facilitated implementation through missions and short-term consultancies. The State Secretariat for Economic Affairs (SECO) of the Swiss Government pledged up to US$ 900,000 for ITC for the project implementation. Almost US$ 300,000 was spent on foreign equipment with most of the balance used for training, local equipment and installations in the laboratory buildings.

Some of the major activities of the project were the site-selection, the construction of the laboratories, the international procurement of laboratory equipment, and the selection and training of laboratory staff.

PROBLEMS ENCOUNTERED

The project faced a number of difficulties which caused the implementation to last seven years and not three years as planned. Moreover, major institutional changes mitigated the achievement of the expected project impacts. Some of the main issues were:

**Belated project approval:** Funding from SECO was made available at the end of 2002 but only in late 2003 did Ethiopia and Switzerland formally appoint ITC as implementing agency. A belated project approval by the Planning Section of the relevant Ministry in the midst of structural reorganization was one of several factors that held back the actual start of project implementation until first half of 2005. These delays were probably due to the Coffee & Tea Authority being abolished and the coffee sub-sector coming under the wings of the newly formed Tea, Coffee & Spices Department within the Ministry of Agriculture & Rural Development (MoARD).

**An extended site-selection process:** Due to the protracted negotiations and political considerations involved, it took almost two years to (i) select the regions, subsequently (ii) choose the actual sites, and eventually (iii) secure the lease of the land for each of the seven laboratories. It also required extra time and sourcing of additional funds when in 2006 MoARD decided to (a) increase the number of laboratories from seven to eight, (b) increase the size of the laboratories from 115 sq. m to 165 sq. m, and (c) increase the number of staff to be trained as cuppers from 21 to 49.

**Increases in building costs:** When the laboratory construction contracts were finally ready to be awarded in 2007, prices of building materials had increased significantly above initially budgeted costs due to high demands, notably for imported cement. Fortunately, the Ministry was able to secure US$ 1.1 million from the International Fund for Agricultural Development (IFAD) to cover the supplementary construction costs.

**Changes within the partner organization:** The project was also not impervious to several reassignments of responsibilities between and within ministries. The initial project partner, the Coffee and Tea Authority (CTA), was dissolved in 2004. MoARD absorbed much of the CTA (including the CLU) and thus the Ministry became the new project partner. New focal points were appointed several times in both MoARD and CLU.

**Limited management capacities for grants:** During the implementation of the project, it became apparent that MoARD was short of staff who could adequately manage and report on external financial resources. This caused delays in decision making and thereby disbursements and implementation.

**Institutional changes in the national coffee marketing system:** The beginning of the laboratories’ operation coincided with major changes in the process of coffee grading and trading at the national level. In October 2008, the Parliament voted to require that nearly all of Ethiopia’s coffee was to be channelled through the newly created Ethiopian Commodity Exchange (ECX), which previously only dealt in grains. Hence the laboratories were transferred from the CLU to become part of the integrated warehouse, handling, grading and marketing system of the ECX in 2009. The laboratories now classify and grade coffee for the Exchange. While the laboratories have gained increased significance in the national coffee sector through their integration into the new marketing system, it delayed their launch. Their new role has shifted priorities and somewhat delayed their ability to serve the original intended purpose: to provide information services on coffee quality to farmers. The commodity exchange’s introduction of new classifications has also dampened the quality comparative advantage for some of Ethiopia’s best coffees – an issue that is being addressed by international buyers and exporters.
FACTORS FOR SUCCESS

Some of the key factors that contributed to the success of the project are the following:

**Strong national political backing**: The project’s core element – laboratories with trained staff – was foreseen in the Prime Minister’s Master Plan for the Coffee Sector from 2003. With the mandate coming from the highest level of the government, the local partners (MoARD and CLU) were better habilitated to implement the project, including the rather politically difficult site selection process.

**Complementary support from donors**: Other organizations joined the initiative and provided complementary support: IFAD covered unforeseen costs of construction of the laboratories and increase of their number and size. The US-based Coffee Quality Institute (CQI) provided professional accreditation training to the staff and continues to train “cuppers” in Ethiopia. Finally, the Embassy of Switzerland contributed funds for (i) ad hoc assistance from an Ethiopia-based Swiss consultant during two years, and (ii) the design and printing of 10,000 copies of a manual used by laboratory staff to advise farmers on optimal post-harvesting techniques.

RESULTS ACHIEVED

The impacts of the project on social and economic development are difficult (maybe impossible) to ascertain because of (i) the large number of factors that influence these (in particular the fluctuations in international prices of coffee and imported goods on which farmers depend), and (ii) the fact that impacts based on the empowerment of a social group often materialize years after the end of a project.

Nonetheless, it is possible to list the project’s major outputs and to make reasonable assertions regarding the project’s outcomes and impacts. These achievements include the following:

**A network of decentralized coffee quality assessment laboratories**: The essential output of the project is a network of seven completed quality assessment laboratories in Western, Southwestern and Southern Ethiopia. Two of the new laboratories were operational already in late 2009. The remaining laboratories became operational during 2010 although some of them are awaiting the completion of warehousing and weigh-station facilities (requirements for their new functions in the ECX grading and marketing system and not part of the original project).

**Increased local capacity for quality assessment**: A total of 49 staff members were trained in the assessment of coffee quality through the “cupping” technique; 42 of these received international professional accreditation (Q-grader status) by the CQI in 2009. These “cuppers” are competent to advise farmers in improving quality through ameliorated post-harvest processing of the coffee cherries. Although the project did not have an explicit strategy to encourage the training of women (and very few women applied for training), two women were trained as cuppers, 14 as roasters (one month training) and 28 as samplers/sorters (15 days training).

**Sustainable rural incomes**: The fee that coffee buyers pay for the service of coffee grading (a fixed cost per volume) assures a source of income to pay the salaries of some 15 staff per laboratory and the maintenance of the buildings. In fact, the transfer of the laboratories from the Ministry and their integration into the Commodity Exchange system assures the long-term sustainability of the facilities.

**Mitigated increases in quality awareness at a local level**: The laboratories’ new function in grading coffee for the Exchange has delayed their availability to provide information services on coffee quality to farmers. Large producers and traders benefit directly from the laboratories’ services, but the empowerment of the small producers through quality awareness has not yet materialized as planned. However, the location of the laboratories in the provinces has demystified the process of quality assessment to thousands of smallholder coffee farmers who for the first time are able to access a laboratory. Furthermore, with the perfection of the ECX system over time, the laboratories may yet serve as a mechanism to communicate the quality of coffee all the way to the farmers, provided the ECX finds the funding and establishes the systems for the trained cuppers to advise the farmers in the further rural areas.

**Mitigated improvement of coffee quality**: With information on quality not yet reaching the majority of farmers due to the change in the function of the laboratories (described above), the project’s outcome on advancing coffee quality improvements is also less than expected. It is assumed, however, that the laboratories will contribute to improve coffee quality as intended once the remaining laboratories open and the relatively new ECX grading and marketing system is improved over time. It appears that the qualities of the lower grades of sundried natural coffees will improve through the new system. One
A surprising and ‘accidental’ positive outcome on quality that has occurred is that some coffees have been differentiated. Some of them, for example Lekempti, have been found to be exceptional in quality. Much of these high quality coffees used to be mixed into the generic sundried Djimmas and were previously sold without a premium.

**Improved efficiency in marketing:** As an integral part of the new ECX system, the laboratories have contributed to the improved efficiency of coffee grading and controlled marketing for the majority of coffee. The system still needs to adapt further to satisfy international buyers’ demand for high grade and special coffees. The decentralized grading has relieved congestion at the central laboratories in Addis Ababa and thereby has cut costs and time for traders.

**LESSONS LEARNED**

This project provides several lessons for the design and implementation of similar Aid for Trade initiatives, including the following:

*International buyers are key resources for the design of a project:* Faced with the need to develop a project proposal quickly, ITC questioned a number of large coffee buyers on their perceived priority for the coffee sector in Ethiopia. Unanimously they argued that "improved quality awareness at farm level" was a main concern. Following discussions with the Coffee and Tea Authority, the Ministry of Agriculture and other stakeholders, the same issue was brought to the fore. Certainly, participatory stakeholder meetings are essential to develop consensus and ownership for the project, and also to guarantee that a project is not captured by special interests. However, in many cases international buyers can serve to quickly obtain fairly accurate indications of where interventions are most relevant and cost effective. The buyers’ inputs are valuable given their long-term experience in the sector, their ability to compare national sectors across countries, and their strong relationships with national producers and government institutions. Possibly due to this project, there is increasing consideration for coffee quality testing and control at or nearer the growing areas in other countries. This is also leading to the design of large trunks with basic mobile equipment powered for roasting, grinding and heating water from a vehicle, to increase farmer awareness of consumer requirements.

*Development assistance needs to be adapted to the partner’s capacities in project implementation and financial management:* National ministries and partner institutions in developing countries are often characterized by over-stretched capacities, slow procurement systems, modest financial accounting systems, undue political influence, frequent reassignments of key persons, etc. In such contexts, grants to ministries in particular are subject to significant risks. Depending on the partners’ capacities, agencies and donors may therefore need to play a greater role in the implementation and financial management of a project, and provide continuous and proximate assistance to the national institutions to strengthen project management capacities. In line with the national-ownership objectives of the Paris Declaration on Aid Effectiveness (2005), these measures are necessary to ensure that the partner is not penalized for failures in financial accounting and reporting, and that the expected impacts on the target-groups are realized. In the case of this project, a long-term (may be intermittent) ITC project representative in Addis Ababa to support MoARD in overcoming certain blockages and to strengthen its financial management capacities would likely have allowed for timelier project implementation.

**CONCLUSION**

Despite the difficulties and obstacles faced by the *Ethiopian Coffee Quality Improvement Project* (problems certainly not unique in Ethiopia to this initiative!), the project is likely to have sizeable impacts on trade, growth and poverty reduction in the long-term not least because it focused on a very important economic sector (coffee) and a large target group (smallholder farmers).

Moreover, based on the lessons learned from this case, the following recommendations can be made to similar Aid for Trade initiatives:

1) **Consult international buyers for project design:** Buyers often have long-term experience in a sector, the ability to compare national sectors across countries, and strong working relationships with national producers and government institutions. In the past decade the trade of coffee has become even more buyer-driven than before. By simply asking the buyers “*What could we do in this sector in this country which would make you willing to pay more or buy larger quantities*” one gets a very good indication of what needs to be done to develop exports in a given country. The buyer is king!
2) **Thoroughly assess national partners’ capacities in project implementation and financial management, and adapt development assistance accordingly:** The capacities of national public institutions to implement projects and manage financial resources are often inherently weak in developing countries; the form of the development assistance must be adapted to these in order to be effective. In the case of grants to ministries, strong capacities in project implementation and financial management are a precondition to ensure that the expected impacts on the target-groups are realized. Furthermore, continuous and proximate assistance to the national institutions to strengthen project management capacities are often necessary.

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**Coffee in the World**

- Coffee is produced in more than 60 countries; three of them account for more than half of the world’s production: Brazil, Vietnam and Columbia.
- The world annual coffee production is around 7 million tons, of which Brazil produces one-third.
- The share of Africa in the world production is about 12%, a fall from 30% in the 1970s.
- Around 60% of world production is Arabica and 40% the cheaper and easier to grow Robusta.

**Coffee in Ethiopia**

- Ethiopia is the largest coffee producer in Africa: Around 400,000 tons per annum – all of it Arabica.
- Ethiopia and Brazil are the only coffee producing countries that consume a significant portion of their production; around 50% of the production for Ethiopia.
- Annual coffee export from Ethiopia is around 200,000 tons valued at around US$ 500 million.
- Coffee is Ethiopia’s number one source of foreign exchange.
- Ethiopia is one of the few countries where coffee sale is not liberalized (i.e. buyers must purchase through the commodity exchange – only co-operatives and large scale growers are exempt but their coffee qualities are still checked by ECX laboratories). The markets of Tanzania and Kenya are also not fully liberalized.
- Coffee production is mainly in West and South Ethiopia, around 90% based on smallholders.
- An estimated 1.2 million smallholder farmers are engaged in coffee production.
- The quality of Arabica from Ethiopia is generally good. Some regions (e.g. Sidamo, Yirgacheffe and Haraar) receive very high prices.

**Coffee at ITC**

- ITC currently also implements Aid for Trade projects in the coffee sector in Cameroon (2008-12), Uganda (2010-13), and the Economic Community of Central African States (ECCAS) (2010-13).
- ITC is supporting Women coffee associations (IWCA-chapters) in six countries in East Africa (2009-2012).
- Recent ITC reports on the coffee sector include: *Climate Change and the Coffee Industry* (February 2010), *The Coffee Sector in China* (August 2010) and *Microfinance in East Africa – Schemes for Women in the Coffee Sector* (February 2011) – all available online.