

SUPPORTING THE COMPETITIVENESS OF CENTRAL AMERICAN COFFEE

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July 2012





The project provided technical assistance and helped establish market linkages for experienced small coffee producers in five Central American countries. This enabled their entry into a higher value specialty coffee value chain, and potentially prevented exclusion from the market following the coffee crisis at the turn of the century.

This case study assesses the project "Supporting the Competitiveness of Central American Coffee", one of more than 40 projects implemented in the Latin American and Caribbean Region, within MIF's "Linking Small Producers to High Value Agriculture Markets" thematic work area. These projects provide technical assistance, technological solutions, and access to finance to organized farmer groups (cooperatives, social enterprises and others) whose products have proven market demand in a variety of sectors and industries such as fisheries, horticulture, dairy, coffee, cocoa, and stevia, to name a few.

The CGGC – Duke University researchers assessed five of these projects using a four-pillar framework designed to identify key areas that improve sustainable inclusion to value chains. Each case study in the series synthesizes common challenges and best practices implemented by MIF's partner agencies, while providing valuable insights for ensuring successful outcomes and long-term impacts in inclusive value chain projects.

This case study is part of a more comprehensive study titled "Assessment of Five High-Value Agriculture Inclusive Business Projects" which encompasses other four case studies (available also in Spanish):

- Development of Micro and Small Rural Apicultural Producers in Nicaragua and Honduras
- ▶ Strengthening the competitiveness of Organic Producers in Andean Micro Watersheds.
- ▶ Upgrading to Organic Cocoa Cultivation in Peru.
- ▶ Strengthening the Competitiveness of the Stevia Value Chain in Paraguay.

Other reports that complement the assessments are (available only in English):

- Inclusion of Small and Medium-Sized Producers in High-Value Agro-Food Value Chains.
- ▶ Basic Principles and Guidelines for Impactful and Sustainable Inclusive Business Interventions in High-Value Agro-Food Value Chains.
- Recommendations to Enhance IDB-MIF Interventions for the Inclusion of Small- and Medium-Sized Producers in the High-Value Agro-Food Chains.

"SUPPORTING THE COMPETITIVENESS OF CENTRAL AMERICAN COFFEE"

The present case study "Supporting the Competitiveness of Central American Coffee" was elaborated by Penny Bamber and Karina Fernandez-Stark from the Center on Globalization, Governance & Competitiveness (CGGC) of the Duke University in collaboration with Alejandro Escobar,

Anabella Palacios, Yolanda Strachan, Dora Moscoso and Ana Castillo, members of the thematic work area "Linking Small Producers to High Value Agriculture Markets" of the Multilateral Investment Fund, a member of the Inter-American Development Bank (IDB) Group. This report is part of a group of studies that analyzed some of the MIF projects to identify best practices to successfully integrate small producers to national and international value chains.

Acknowledgements

The authors would like to thank Griselda Soto, MIF Specialist in Nicaragua, and Edgar Berrios from the agency that implemented the project, who gave their expertise and support to conduct the research, and to all the anonymous interviewees who provided valuable information to produce this report.

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The views and interpretations expressed in this report are those of the authors and do not necessarily represent the views of the companies mentioned, the individuals interviewed or the Multilateral Investment Fund (MIF). The authors welcome comments and feedback at penny.bamber@duke.edu & karina.stark@duke.edu.

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Duke University, Center on Globalization, Governance and Competitiveness (Duke CGGC)

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The Multilateral Investment Fund (MIF) - a member of the **Inter-American Development Bank (IDB) Group** - is the largest provider of technical assistance for private sector development in the Latin American and Caribbean region. Established in 1993, the MIF supports economic growth and poverty reduction by encouraging increased private investment and advancing private sector development. The MIF collaborates with institutions from the private, public and nonprofit sectors to develop and execute business models that support entrepreneurs and poor and low-income households by providing technical assistance grants, equity investments and lending through its different units, organized by strategic thematic agendas.

MULTILATERAL INVESTMENT FUND Inter-American Development Bank http://www5.iadb.org/mif/

INTRODUCTION

The key to sustainable inclusion in any value chain is competitiveness; that is, the ability to provide the desired quantity and quality of a specific product in a more economical and timely manner than other suppliers. In high value agricultural markets, improved cold chain management and transport have facilitated the expansion of global trade, and now producers must compete with suppliers from all over the world. This requires continuous improvements in productivity and quality to meet product specifications of end buyers, cost-efficient market ready packaging, timely logistics, and, of course, economies of scale.

FOUR-PILLAR MODEL FOR VALUE CHAIN INCLUSION

Small- and medium-sized producers, in particular, face constraints that limit their competitiveness and prevent their participation in the value chain. We identified four major pillars that every intervention should include to raise the competitiveness of smallholder farmers in order to include them in a sustainable way in the national or international value chain.

1. Access to market:

Many small producers do not have the required contacts to establish relationships with potential buyers due to broad geographic, cultural and educational factors, amongst others. Inclusive business interventions must fill an important role of establishing a connection between producers and buyers. This connection requires educating lead firms about the business potential of sourcing from small producers, as well as facilitating interactions until the small producers are in a position to sustainably manage

the relationship independently. Generally, this is the weakest link in any value chain intervention.

2. Access to training:

While many small producers may have worked in agriculture their entire lives, specific training is often required in order to improve productivity and product quality, introduce new technologies and plant varieties, and facilitate compliance with food safety and other certification requirements that govern entry into the national, regional and

international value chains. The training component should include technical education, entrepreneurship, financial literacy and any other social/soft skills necessary to help insert producers in the value chain. In addition, peer knowledge transfer components; such as field visits to successful farms and demonstration plots should be included. These can be powerful tools for teaching and motivating producers.

3. Coordination and collaboration building:

Because small producers need to achieve economies of scale in order to compete in the marketplace, it is important they collaborate and work together. Additionally, and perhaps equally as important, collaboration facilitates the exchange of ideas to manage common problems, reduces information asymmetries in production and builds social capital that empowers producers to sell their products in more sophisticated markets. However, producers often fail to selforganize formally. Producers thus often need the encouragement and support of external actors to appreciate the payoffs of collective action and establish themselves as formal, legal organizations. These horizontal linkages facilitate producers' connections with other upstream and downstream value chain actors, such as input and service providers.

4. Access to finance:

Entry into the value chain requires certain investments such as infrastructure, equipment and obtaining certifications. Small producers, however, often face liquidity and credit constraints as they have no access to formal finance channels. In addition, they often lack the necessary financial literacy to apply for

or manage potential loans. These limit their potential to make the required investments. These credit constraints have been found to prevent small producers from investing in necessary equipment, such as irrigation systems, greenhouses or cold storage, to achieve productivity improvements, to develop unused portions of their land or to upgrade into higher value products, thereby limiting their potential to participate in coordinated value chains. Interventions can play an important role in reducing information asymmetries and helping the banking sector to create appropriate, yet profitable, financial instruments to meet the needs of this group.



▶ PROJECT DESCRIPTION

The project focused on improving the competitiveness of selected small and medium specialty¹ coffee producers in five Central American countries (Costa Rica, El Salvador, Guatemala, Honduras and Nicaragua) following the international coffee crisis in the early 2000s. There were two key components: (1) technical assistance for cultivation of high quality coffee and (2) establishing links with foreign buyers. Producers were trained in the requirements of high quality coffee for global markets, the potential price premiums paid out for guality coffee and in improved production practices to obtain this quality. In order to market and certify the quality of the coffee in Central America, the project brought the international cupping award "The Cup of Excellence" to the region.² The project also provided administrative and technical support to help producers obtain certifications required by foreign buyers. Different buyers selected the beneficiaries' organizations, committing to purchase their coffee once they reached certain quality thresholds. This project also included an investment component to improve equipment and infrastructure. Each cooperative was required to provide matching funds for these investments. Originally the project included almost 3,000 beneficiaries organized in 10 cooperatives (2 cooperatives per country). These cooperatives varied in size, from just 10 members to the largest at 2,400 members. Approximately, 3,000 additional beneficiaries were incorporated into the project in the last year. The majority of the beneficiaries selected were experienced coffee growers.



¹ Specialty coffee refers to Arabica coffee grown at a specific altitude, above 1,200 m.s.l. The climate at this altitude is particularly good for producing highest quality coffee.

^{2 &}quot;The Cup of Excellence" is a strict competition that selects the very best coffee produced in a country for a particular year. Winning coffees are chosen by a select group of national and international cuppers. The final winners are awarded the prestigious Cup of Excellence® and sold to the highest bidder during an internet auction.

■ LESSONS LEARNED

- Establishing links between producers in Central America and the international buyers was central to the program's success. The strategy consisted of presenting buyers with a profile list of producers from Central America from which the buyers selected a certain number of producers to support. Buyers received information regarding the training implemented to improve coffee quality. Later, buyers received samples and finally purchased the coffee. In addition, the project was successful in diffusing information on buyers' preferences and standards through manuals, training and activities.
- Selecting the best small producers ensured the probability of success. However, a large number of producers were not included. In Nicaragua there are approximately 40,000 small coffee producers and this project se-

- lected two cooperatives with 44 members in total. In the last year, the project included 700 additional producers.
- ▶ Failure to coordinate with other large donor initiatives limited potential impact of the project. Several initiatives related to coffee were under way in the region at the same time as this project (2003-2004), however, there was no centralized record of these projects.
- ▶ Educating producers on how to implement good agricultural practices is important. Educating them about why one should implement good agricultural practices, however, is just as important. Explicitly highlighting the connection between these practices and access to international markets facilitated faster and more widespread adoption.

■ OVERALL ASSESSMENT OF SUSTAINABLE INCLUSION

SUSTAINABLE INCLUSIVENESS

- ▶ The project selected a product with a raising global demand. Experienced coffee producers aligned their production with buyers needs with the support of the executing agency that provided them training and access to market linking future buyers with beneficiaries.
- ▶ The good agricultural practices of producing specialty coffee allowed to improve the quality of the coffee and also to include environmental friendly methods.
- Beneficiaries and families increased their income and quality of life.
- The implemented agency was a facilitator that guaranteed the sustainability of the inclusion; quality coffee producers established a business relationship with foreign buyers.

STRONG



■ INSTITUTIONAL ARRANGEMENT

Technoserve, the executing agency, partnered with local coffee organizations in each country to coordinate the project activities (listed below). These organizations identified potential cooperatives for participation. Prerequisites for participation included: production at 1,200 meters above sea level, exports of 10% of production, sound infrastructure for year-round operations, production capacity of 150 tons, financial stability with access to water and electricity. The project began in November 2003 and finished in April 2009.

Project Stakeholders

ORGANIZATION	ROLE	DESCRIPTION
Technoserve	EXECUTING AGENCY AND CO-FINANCE	Technoserve is a non-profit organization focused on developing and promoting services to build local capacity and find business solutions to address rural poverty. The organization has worked with coffee producers for over 30 years.
MIF	CO-FINANCE	Griselda Soto, MIF Specialist in the IDB Country Office in Nicaragua supervised the implementation of the project.
Coffee Cooperatives	BENEFICIARIES	Two cooperatives were selected per country totaling 2,924 coffee growers. The project was expanded and 10 new cooperatives were added in which 3,000 producers were incorporated.
Coffee organizations in each country	SUPPORTING ORGANIZATIONS IN EACH COUNTRY	Asociación de Cafés Finos in Costa Rica, Asociación de Cafés Especiales de Nicaragua, Instituto Hondureño del Café in Honduras, Asociación Nacional del Café in Guatemala, and Consejo Salvadoreño del Café in El Salvador. These organizations provided support to coordinate project activities and expertise in the preparation of a Good Agricultural Practices manual for quality coffee production.
US buyers	PROJECT PARTNERS	Buyers in the United States agreed to participate in this project, selecting 10 producer groups from which they would purchase coffee once a minimum quality threshold had been reached.
Alliance for Coffee Excellence (ACE)	PROJECT PARTNER	The Cup of Excellence is a strict competition that selects the very best coffee produced in a country any particular year. Winning coffees are chosen by a select group of national and international cuppers. The final winners are awarded the prestigious Cup of Excellence® recognition.
Coffee Quality Institute (CQI)	SUPPORTING ORGANIZATION	The Coffee Quality Institute (CQI) is a non-profit organization working internationally to improve the quality of coffee and the lives of the people who produce it.
USAID	EXTERNAL DEVELOPMENT AGENCY	USAID did not participate directly in the project, however, in a parallel project they trained cuppers to grade coffee by quality, helping to certify 40 cuppers. Exporters were thus able to recognize the quality of their coffee for export benchmarked with international standards established by the Alliance for Coffee Excellence (ACE).

■ DESCRIPTION OF THE VALUE CHAIN

Coffee Value Chain - Summary Project Intervention

Program Beneficiaries	3,000 COFFEE PRODUCERS IN CENTRAL AMERICA (an additional 3,000 were included in the project's final year)					
Project Intervention Points	\downarrow	\downarrow	\downarrow			\vee
Value Chain Segments	Inputs	Production	Wet Processing	Dry Processing	Roasting	Distribution/ Wholeselling
Key Actors	Implemented agency provided technical assistance an 50% infraestructure investment	Small size producers 10 groups	Small size producers 10 groups	Exporters	Roasters/ foreign buyers (usaually in foreign market)	Foreign buyers
Inputs/ Outputs	Inputs: Seeds, Technical assistance, Fertilizer Contracts	Outputs: Mature coffee cherries	Inputs: Coffee Cherries Outputs: Coffee beans ready for dry procesing	Inputs: wet beans Output: Green Coffee	Inputs: Green coffee Output: Roasted coffee beans (ground or whole)	Input: Roasted coffee beans (ground or whole)
Key Markets				Key Markets: Foreign markets, especially US and Europe		

Source: Authors.

The coffee value chain illustration above shows that the project intervenes on several chain segments. Prior to the project, beneficiaries sold their coffee as a commodity and lower levels of productivity made it difficult to compete.³ In order to achieve competitiveness in international markets the intervention identified and addressed bottlenecks in the value chain. These included implementation of good agricultural practices in the harvesting and wet processing stages, which improved overall productivity and quality. Additionally, the project provided investment support to improve the infrastructure and, more importantly, it established links between producers and foreign buyers of specialty coffee.

³ During the project design stage, it is imperative to perform a baseline of the beneficiary's competitiveness using a market study as benchmark. Criteria for competitiveness assessment include: Productivity, product/service quality, standards and certifications, produce/service image, packing, logistics, economies of scale, necessity to add value to the product/service, assess if the product/service is suitable for SMEs commercialization. See introductory note for further information.

MODEL FOR VALUE CHAIN INCLUSION

Small- and medium-sized producers are often excluded from the value chain because they face resource, skills and market knowledge constraints. As noted before, four major constraints found to affect the success of agro-food inclusive business projects are access to finance, access to training, access to markets and coordination and collaboration amongst producers and other value chain actors. Below we discuss how each of these constraints was addressed in this project.

Assessment of the Four Value Chain Inclusion Pillars in this Project

Access to Finance

- No finance component was included in this project.
- ▶ The cooperatives selected were required to already have access to finance and have financial resources for investment in infrastructure improvements.
- ▶ This project provided matching funds to improve infrastructure and to buy equipment needed to implement good agricultural practices.
- Several cooperatives obtained credit from international institutions which alleviated cash flow problems and was used to invest in equipment and infrastructure.
- Many of these cooperatives worked with other international organizations and aid agencies to obtain extra resources.

Coordination & Collaboration Building (horizontal and vertical)

- Since the project only worked with well-established cooperatives, no activities were focused on internal network building.
- Producers had the opportunity to sell directly to foreign buyers. This created a direct link with the clients leapfrogging the national intermediaries (exporters) This link with other actors of the value chain allowed to capture more value for producers.

Access to Training

- Technical training was excellent.
- It was based on information from the American Association of Specialty Coffee standards and ISO 9001-2000 guidelines.
- A Good Agricultural Practices manual was developed together with the five country coffee associations. Beneficiaries of this training initiative included a broad number of coffee producers, including producers that were not direct beneficiaries of the IDB-MIF project.

- Trainings were specifically focused on the harvesting and the wet method processing stages. These two stages were found to be critical for the production of quality coffee.
- In addition, producers were taught how to distinguish between quality levels, adjusting the information asymmetries between producers and intermediaries or buyers.
- ▶ The training format was combined classroom sessions with field days. Internships also played an important role in raising awareness of best practices.

Access to Market

▶ This was a strong component of the project.

- ▶ The project partnered with international buyers who selected and sponsored 10 cooperatives. These buyers received information on the activities coffee growers were carrying out to raise the quality of the product. Once the coffee reached the threshold quality required, buyers purchased the coffee
- ▶ The project helped several cooperatives to obtain certifications required by buyers. Specifically: C.A.F.E. Practices (Starbucks), Fair Trade, Organic, Rainforest Alliance and UTZ.







Number of Beneficiaries by Country

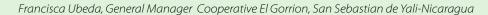
COUNTRY	NUMBER OF BENEFICIARIES	NUMBER OF BENEFICIARIES ADDED IN FINAL YEAR	TOTAL
Costa Rica	2552	1250	3802
El Salvador	125	745	870
Honduras	49	184	233
Guatemala	154	205	359
Nicaragua	44	787	831
Total	2924	3171	6095

Note: some cooperatives members grow different products. In this counting all cooperatives members are included, not only coffee producers.

▶ PROJECT RESULTS

RESULTS IMPACTS Improved productivity and quality. Increased family income. Increased export volumes > Job creation. (US\$4.4 millions). Extended education for children. Increased percentage of specialty Producer empowerment. coffee (ex. In 2003 in Nicaragua, 30% of o Producers felt proud of their achievements the exported coffee was specialty, by The project helped to shift Central Ameri-2011, it accounted for 50% of exports). can coffee from being a commodity to a dif-> 591 producers were trained in improved ferentiate product. harvesting and wet processing stages. Central American coffee became known for > 10 groups were selected by international its excellent quality. buyers to sell their coffee. Coffee growers were invited to participate in the "Excellence Cup" award. Several were selected and auctioned their coffees online. > Several producers received certifications for sale to international markets. These included: C.A.F.E. Practices (Starbucks), Fair Trade, Organic, Rainforest Alliance and UTZ. Producers improved the infrastructure of the wet processing stage.

"Before [the project], the producers did not know how to produce good quality coffee...; today, they do. This has allowed them to offer a better product, improving their incomes and helping them to improve their lives."





SUSTAINABLE VALUE CHAIN INCLUSION OF SMALL PRODUCERS: AN ASSESSMENT

This project took important steps to ensure the participation of small producers in the global value chain. The producers were already well positioned to produce coffee, with access to credit and formalized producer associations. Prior to the project, they used to sell an undifferentiated product to local exporters at very low prices. In this project, beneficiaries received technical assistance to produce quality coffee and were provided direct access to foreign buyers. A comprehensive assessment is provided in the table below.

- Producers had **access to credit**, through two direct avenues CrediNaranjillo, a complementary project or by use of their sales contracts as collateral with international banks. In addition, credit for organic fertilizer, the key input, was provided by COOPAIN.
- Producers received very good **technical training** through which they were able to increase their product quality by international standards. Prior to technical training, awareness of the importance of implementing the good agricultural practices and the meaning of producing a quality coffee was raised through visits to model production farms and meetings with trainers.
- Producers were already well **coordinated with high levels of collaboration** prior to the project (selection criteria required pre-established cooperatives). The majority of these cooperatives had been operating for decades.
- The access to market strategy was exceptional. Linking foreign buyers from the outset of the project was a very wise tactic, as it generated buy-in amongst these actors for the project's long term goals. This strategy was also very useful to ascertain and transmit the standards of international buyers to the producers.
- Access to finance was not included in this project as the cooperatives selected were required to have pre-established access to credit, as well as their own resources for investing in infrastructure improvements. MIF resources were used to invest in infrastructure and equipment needed to implement good agricultural practices.

Positive elements that facilitated the project included:

- ▶ Considerable experience and development trajectory of the groups selected for participation.
- ▶ Strong global demand for specialty coffee.
- ▶ Highly motivated and technically strong human resources within the executing agency.
- ▶ Presence and collaboration of coffee institutions of each country.

Some challenges limited the success of the project:

▶ The complexity of coordinating of the five countries selected in the project.

This project accelerated the supply for good quality specialty coffee from Central America following the coffee crisis in the early 2000 in which commodity coffee prices dropped below production costs. Producing specialty coffee and products that met the quality and certifications demanded by the most sophisticated international markets assured the sustainability of this project. Ongoing strong demand for specialty coffee from the region in the international market highlights the success of coffee initiatives carried out during the 2000s. However, given the large number of initiatives that were carried out simultaneously, it is difficult to determine the extent of the specific impact of the MIF project.

▶ PROJECT BUDGET

The initial budget for the project was US\$ 4,615,450 with US\$3,000,000 provided by IDB and US\$1,615,450 provided by Technoserve.



≥ SUSTAINABLE VALUE CHAIN INCLUSION OF SMALL PRODUCERS IN THE GLOBAL COFFEE **CHAIN: AN ASSESSMENT**

	CRITERIA	KEY POINTS	VALUATION
AAIN	Target Product	Specialty coffee is an excellent product for small- and medium-sized producers due to labor intensity, especially organic and other type of certified coffee.	
SELECTED VALUE CHAIN		Commercial viability: Local and global demand for specialty coffee grew significantly over the last decade. Central American coffee was successfully positioned as excellent high quality specialty coffee. In general, exports of specialty coffees by country increased tremendously in comparison to commodity coffee. (Guatemala 90%, Costa Rica 80% and Nicaragua 50%.)	
SELECTE	Beneficiaries	The beneficiaries were experienced coffee producers that had previously exported their product. Their main requirements to capture more value from the chain were extra technical support to implement good agricultural practices and linkages with foreign buyers.	•
	Inclusion four pillars	All the value chain inclusion pillars were covered. Some of them were pre-requisites for participation, while the access to market and the technical training were covered by this project	
INCLUSIVENESS	Competitiveness	Awareness was raised regarding the relationship between product quality, implementing good agricultural practices and access to international markets. Both quality and productivity were increased. Additionally producers obtained specific certifications to access the global market.	
		Risks: The selection of experienced producers with strong cooperative support and access to water minimized moral hazard and climatic risks involved.	
	Upgradeability/ Potential to add value	There is a lot of potential to continue to add value by producing premium coffees. Some of these coffees are auctioned online for very high prices. This means that product upgrading is a good opportunity for the beneficiaries to pursue.	
	Economic sustainability	It is quite likely that the beneficiaries would have achieved the outcomes without the intervention, as the producers were organized, had access to credit, were experienced producers and already participating in the international market. However, the project accelerated the shift to the production of specialty coffee.	
		Specialty coffee producers in these countries continued to expand their production after the project finished, including the beneficiaries of this project.	
	Social sustainability	The project did not specifically include any gender or youth component. However, many of the beneficiaries experienced increased income that was used to educate their children.	•
	Environmental sustainability	The good agricultural practices specifically regulate the cherry coffee waste during the wet processing stage. Prior to the project, producers contaminated the rivers and water sources. Additionally, several of the certifications obtained by the producers regulate the environment protection.	
	Spillovers/impact	This project had several positive results: improved productivity and quality, increased export volumes, increased percentage of specialty coffee exported, which allowed for impacts such as increased family income, job creation, extended education for children and producer empowerment.	
IMPACT		One of the most important spillover effects was that this project contributed to shift Central American coffee from being a commodity to a differentiate product. Now Central American coffee became known for its excellent quality.	
	Potential for replication	Certain areas of the project can be replicated: for example, the design of training courses based on specific international buyers' standards. The model for access to international markets, which included buyer involvement from the outset of the project, should be replicated.	•

Weak (











