

# When Fairtrade is not enough: coffee cooperative development and the role of certification systems

*Jason Donovan, Trent Blare, and Meliza Peña*

**Abstract:** *Coffee cooperatives employ certification systems, in part, to structure their relations with growers and buyers, and generate income for business operations and investments. In Central America, development agencies have targeted certified coffee cooperatives for support, based on the assumption that cooperatives are uniquely positioned to deliver benefits to poor coffee farmers. Research on certification systems has focused on the benefits obtained by smallholders from participation in a single system, often Fairtrade. This research examines cooperatives and how they engage with certification systems and the implications of this engagement for building their business. Data was collected in 2018 from four cooperatives in Nicaragua and Honduras. Fairtrade certification and related coffee sales formed the bedrock of their business strategy, but Fairtrade alone was insufficient to sustain operations, even when combined with organic certification, due to insufficient demand. Additional systems, such as UTZ Certified, C.A.F.E. Practices, and Rainforest Alliance were employed. These additional systems allowed cooperatives to sell excess coffee on relatively favourable terms – coffee which otherwise would have been sold as non-certified coffee. Results suggest that engagement in multiple certification systems is critical for sustaining cooperatives in the region, but they also dampen expectations that certification systems can provide a framework for driving long-term systemic change.*

**Keywords:** cooperatives, voluntary standard systems, environment, Fairtrade, organic, UTZ, Rainforest Alliance, business strategy

VOLUNTARY AND PRIVATE CERTIFICATION SYSTEMS seek to verify and incentivize actions by producers, processors, and traders in accordance with established rules and parameters. They provide a framework to inform and guide the decisions and interactions of participants in a given value chain, from producers through to retailers and consumers. Value chains for coffee, cocoa, oil palm, timber, and horticulture rank among those in agriculture where certification has been the most present. Development agencies, governments, and researchers have shown considerable interest in the perceived ability of certification systems to contribute to development goals around sustainable development (Boiral and Gendron, 2011),

---

*Jason Donovan (j.donovan@cgiar.org) was researcher, Trent Blare (t.blare@cgiar.org) was a marketing and value chain specialist, and Meliza Peña (meliza.p26@gmail.com) was research assistant at World Agroforestry, Lima, Peru (all authors currently at the International Maize and Wheat Improvement Center (CIMMYT), Mexico)*

© Practical Action Publishing, 2020, [www.practicalactionpublishing.org](http://www.practicalactionpublishing.org), ISSN: 2046-1879/2046-1887

biodiversity conservation (Tayleur et al., 2016; Carlson et al., 2017), worker welfare (Raynolds, 2016), and food safety and quality (Trafialek and Kolanowski, 2017).

Among certification systems employed in the coffee sector, Fairtrade has captured the most attention. During the global coffee crisis (1999–2003), a period when coffee prices fell below the cost of production for many farmers in Central America, interest in Fairtrade certification reached a fever pitch. Access to Fairtrade certification allowed cooperatives to negotiate more favourable terms with international buyers, which in turn allowed cooperatives to provide services to their members and in some cases, pass on higher farm-gate prices (Bacon, 2004). In theory, higher farm-gate prices allowed smallholders to increase their incomes, build productive assets and mitigate the worst effects of market price downturns. Studies have argued the benefits of Fairtrade for supporting livelihoods of coffee farming households, facilitating cooperative development, and reducing the environmental impacts from primary production (Blackman and Naranjo, 2012; Ruben and Hoebink, 2015; Van Rijsbergen et al., 2016). Other studies have presented mixed outcomes for farmers from Fairtrade engagement (Bacon et al., 2008; Ruben and Fort, 2011; Donovan and Poole, 2014; Vellema et al. 2015). However, other studies have been quite critical, generally basing their arguments on the limitations of smallholders to intensify their coffee production (Wilson, 2010; Barham et al., 2011; Beuchelt and Zeller, 2011; Weber, 2011). Another challenge for Fairtrade to deliver impacts for growers, highlighted by Minten et al. (2018), was the limited transmission of higher export prices from the sale of Fairtrade coffee into higher farm-gate prices for producers in Ethiopia.

To date, research has focused relatively little attention on cooperatives and their expectations, bottlenecks, and strategies as related to engagement with certification systems. Cooperatives decide which certification systems will be employed, how to engage with farmers to implement the systems, and the distribution of price premiums and other benefits from the sale of certified coffees. Moreover, in most cases, they engage directly with international coffee buyers and NGOs, and government agencies looking to support smallholder coffee production. Where research has touched on cooperatives and certification, discussions have focused on the role of Fairtrade in shaping institutional capacities (Valkila and Nygren, 2010; Poole and Donovan, 2014). While sales of Fairtrade coffee have continued to grow in recent years (roughly 38 per cent increase from 2011 to 2016), the overall marketing environment for Fairtrade-certified coffee remains quite volatile. The strong growth of Fairtrade coffee sales from Ethiopia, Honduras, and Peru (Tulet, 2010), the increased competition among suppliers of coffee beans (24 per cent increase in the number of Fairtrade-certified producer organizations between 2011 and 2016), and the emergence and expansion of other standard systems for coffee have provided northern-based coffee buyers with additional options.

This study examines how coffee cooperatives in Honduras and Nicaragua employ certification systems, the challenges they face in implementation of the standards, and options for innovation in support from certification agencies, NGOs, and government organizations. Among certification systems, Fairtrade

offers cooperatives two unique and important benefits: a floor selling price (currently at US\$1.40 per pound for washed, non-organic coffee beans; \$3.08 per kg) to guard against severe market downturns and the social premium paid by coffee buyers (currently at \$0.20 per pound; \$0.44 per kg) directly to coffee cooperatives. However, research has highlighted the challenges faced by cooperatives to sell all of their members' coffee on Fairtrade terms (Donovan and Poole, 2014; Foundjem et al., 2016). The production of certified coffees, not only for Fairtrade coffee but across other certification systems, has expanded greatly in recent years. Between 2010 and 2016, for example, the areas of coffee under Rainforest Alliance and UTZ Certified grew by 34 per cent and 22 per cent, respectively. In 2016, four of the major voluntary certification standards in international coffee trade (Fairtrade International, organic, Rainforest Alliance and UTZ Certified) totalled roughly 3.2 million hectares certified (Lernoud et al., 2018). In general, the coffee industry in producing countries has grown increasingly reliant on certification to signal quality and social and environmental responsibility. Relatively little is known about how cooperatives have responded to these changing market conditions, the implications for their long-term business growth and development, and actions that can be taken to strengthen their positions in certification and other speciality markets.

This paper is organized into four sections. The next section presents the methods used in sample design, the selection of the cooperatives chosen for the case studies and data collection, and interviews with key informants both within and outside the cooperatives. This is followed by the results, divided into cooperatives' relationship with buyers and suppliers (farmers) and internal processes. The final section summarizes the results and presents practical recommendations for certification systems, NGOs, and others to deepen their engagement with coffee cooperatives.

## Methods

We employed a comparative case study approach that included four coffee cooperatives. This allowed us to incorporate several important 'how' and 'why' questions into research design – important given the very limited research on the strategies for engagement with certification programmes by cooperatives in general and in Central America in particular. This method also allowed us to recognize the role played by the context in which the cooperatives operate. At the time of data collection, all of the selected cooperatives engaged in Fairtrade, UTZ Certified, organic, and C.A.F.E. Practices, while some also engaged in Rainforest Alliance and Bird Friendly.

For each case, a team of three researchers interviewed cooperative representatives in situ during a two-day period. The interviews covered various topics: the businesses' interaction with certification schemes, impression of these certifications, marketing and sales, investments carried out in certification systems, relations with farmers, changes in practices, and visions for the future. The team interviewed several different actors within each cooperative (e.g. manager, accountant, technicians,

**Table 1** Overview of sampled coffee businesses

<i>Business</i>	<i>Business type</i>	<i>Country</i>	<i>Year established</i>	<i>Sales 2016–17 harvest (t)</i>	<i>Number of certifications</i>
CP1	Cooperative	Honduras	1999	25,094	6
CP2	Cooperative	Honduras	2003	N/A*	5
CP3	Cooperative	Nicaragua	1993	20,380	6
CP4	Cooperative	Nicaragua	2011	N/A*	5

Note: \*data not provided

employees, farmers) to understand the different perspectives on the certification. They also interviewed stakeholders engaged with the cooperatives, such as NGO staff, local certification representatives, and buyers. This strategy allowed for triangulation and clarification of the findings by exploring complex issues with different stakeholders.

We selected the cases to achieve variation in terms of number of certification systems used (i.e. UTZ, Rainforest Alliance, Fairtrade, C.A.F.E. Practices, Bird Friendly, and organic), experience with certification (more than four years and less than four years), and the businesses size in terms of number of suppliers and certified coffee export volumes. All but one cooperative was established in the 1990s and early 2000s (Table 1). Cooperative 4 in Nicaragua was the newest of the group, established in 2011 by experienced former employees of a well-established coffee cooperative. In general, the cooperatives had extensive experience of the coffee buyers and certification systems. They had weathered major fluctuations in coffee prices, as well as the more recent outbreak of coffee rust. Cooperatives had highly diversified certification portfolios – all had at least five voluntary certifications and two had six (several had additional lesser-known standards such as women-only coffee and coffee from small farms). In addition to Fairtrade, UTZ, and organic certifications, all sampled certificate holders had C.A.F.E. Practices, reflecting the strong reach of Starbucks in the region and the capacity of the sampled cooperatives to engage with demanding buyers.

## Results

### *Buyer relations*

The cooperatives had, on average, 12 years of experience selling certified coffee directly to foreign buyers (Table 2). Organic certification provided the entryway into certified coffee. The cooperatives engaged with up to a dozen or more international buyers for the sale of conventional and certified coffee, often selling relatively small lots of a given certified coffee to a single buyer (e.g. Cooperative 3 sold one container of Bird-Friendly-certified coffee (roughly 25,000 kg) to three buyers). The overarching objective was to sell all their coffee purchased from members as certified coffee. For the two cooperatives for which sales data were available, between 69 per cent and 100 per cent of their coffee was sold as certified in 2017 (Table 3). Although repeated attempts were made to gather sales data

**Table 2** Sampled businesses' relationship with certifications

<i>Business</i>	<i>Year of first coffee sale</i>	<i>Year of first certification</i>	<i>First certification obtained</i>	<i>First certified sale</i>
CP1	1999	2004	Organic	2006
CP2	2003	2006	Organic	2006
CP3	1993	1994	Organic	2004
CP4	2011	2011	Organic	2011

**Table 3** Volume sold from 2016/2017 harvest and trend in sales over the past five years (CP2 and CP4 provided no data on the volumes of coffee sold)

	<i>CP1 (1,000 kg)</i>	<i>CP3 (1,000 kg)</i>
<b>Non-certified</b>		
Volume	0	8,700
Trends <sup>1</sup>	0	++
<b>Bird Friendly</b>		
Volume	730	680
Trends	0	0
<b>C.A.F.E. Practices</b>		
Volume	5,600	7,700
Trends	0	0
<b>Fairtrade</b>		
Volume	10,000	
Trends	++	
<b>Organic</b>		
Volume	5,500	6,900 <sup>2</sup>
Trends	++	-
<b>Rainforest Alliance</b>		
Volume	2,900	1,000
Trends	0	
<b>UTZ Certified</b>		
Volume	364	2,300
Trends	--	N/A

Note: <sup>1</sup> ++ much more, + more, 0 no change, - less, -- much less

<sup>2</sup> Sold as double certified organic and Fairtrade

from the other two cooperatives both in person during the visit and remotely following the visits, two of the cooperatives were either unable, due to the inexperienced accountants without knowledge of the sales, or unwilling to provide sales data. Sales of Fairtrade and organic coffees comprised the majority of certified coffee sales (between 62 and 78 per cent of total sales volume), followed by C.A.F.E. Practices, Rainforest Alliance, and UTZ Certified. Even when sales of a particular certified coffee were low and declining (e.g. Cooperative 1 with UTZ Certified, Cooperative 3 with organic), cooperatives maintained the certification in anticipation of possible future demand. Where non-certified coffee was sold (e.g. Cooperatives 3 and 4), cooperatives purchased it from non-members for sale

to international buyers who also purchased certified coffee, thus ensuring no potential demand was unmet (and ensuring higher farm-gate prices from sales of certified coffee were reserved for members).

The cooperatives maintained the standards to demonstrate an overall quality commitment even when no coffee produced under a given label was sold. The cooperatives wanted to maintain the possibility for future sales under the label. Furthermore, coffee buyers have begun to demand coffee produced and certified under multiple certification systems (e.g. Fairtrade and organic), requiring the cooperatives to maintain these multiple labels. Even in the case of Fairtrade, which covers all members of a given cooperative, cooperatives segmented their supplier base: purchasing coffee on Fairtrade terms only from members and purchasing coffee from non-members to sell as UTZ Certified or without certification. While multiple certification required increased costs in auditing, the certification systems overlapped in terms of standards (e.g. encouragement of good agricultural practices and investments to reduce contamination from milling operations). Thus, once one standard was implemented, there was relatively little cost in implementing another one; the returns from investments by coffee businesses in upgrading their production and processing practices are spread across multiple certification systems. The opportunities and costs inherent in the set of certification systems mattered more than the implications of a single certification system.

Cooperatives identified the most pressing bottleneck they faced for expanding sales of certified coffee (Table 4). In general, lack of demand was perceived as the limiting factor. In a few instances, the cooperatives mentioned that they could not produce enough certified coffee to meet customers' demand, which was particularly the case of Cooperative 1 in Honduras for Fairtrade and C.A.F.E. Practices. The manager mentioned that the cooperative needed to certify more farmers in these standards to meet the demand – interested farmers had yet to finish the certification process. Cooperative 4 faced the same challenge with C.A.F.E. Practices – it is a small cooperative with 99 certified small-scale farmers and could not meet the demand for larger volume purchases. For organically certified coffee, the standard was considered so difficult to achieve that Cooperatives 1 and 2 said farmers were not interested in completing the extra requirements and added work.

**Table 4** Factors limiting the cooperatives' sale of certified coffee

<i>Certification</i>	<i>CP1</i>	<i>CP2</i>	<i>CP3</i>	<i>CP4</i>
C.A.F.E. Practices	Shortage of production	Business not interested	Lack of demand	Shortage of production
Fairtrade	Shortage of production	Lack of demand	Lack of demand	Lack of demand
Organic	Shortage of production	Shortage of production	Lack of demand	Lack of demand
Rainforest Alliance	Farmers not interested	Lack of demand	Lack of demand	Not applicable
UTZ	Lack of demand	Lack of demand	Lack of demand	Lack of demand

**Table 5** Average price received (\$/lb) for certified and non-certified coffee for 2016/2017 harvest<sup>1</sup>

	CP3	CP4
Non-certified	1.60	1.60
UTZ	1.65	Certified, but not sold
Rainforest Alliance	1.75	Not certified
C.A.F.E. Practices	1.75	1.60
Bird Friendly	1.75	Certified, but not sold
Fairtrade	2.00	1.95
Organic	2.05	1.90

Note: <sup>1</sup> CP1 and CP2 did not provide price data.

Thus, they were unable to produce enough organically certified coffee despite the demand for it. For UTZ Certified, cooperatives mentioned that they consistently produced and had more coffee available than could be sold.

The primary motivation for engagement in certification was the potential to sell coffee above the international price ('C futures price'). During the first five months of 2017 (the period when the majority of the 2016 coffee harvest was sold), the International Coffee Organization (ICO)'s indicator price for 'other mild Arabicas' averaged \$1.49 per kg. For the two cooperatives from which price data was available, Table 5 presents the reported average price for certified coffee sold (by certification system) and non-certified coffee. In general, the cooperatives were able to negotiate prices for non-certified coffee at or slightly above the ICO price, reflecting quality premiums based on country of origin and seller reputation. Across certified coffees, the size of the premium was not uniform. The cooperatives were able to earn a few cents more per pound for coffee sold under UTZ Certified, Rainforest Alliance, and C.A.F.E. Practices. Cooperative 3 signed contracts with particularly high premiums for Rainforest Alliance-certified coffee. The cooperatives received significantly more for Fairtrade and organically certified coffee, roughly \$0.50 or more per pound (\$1.10 per kg), because of the price floor for Fairtrade and mandatory premiums paid for each of these certifications.

Overall, the cooperatives reported few major problems with international coffee buyers. However, engagement was basically limited to the purchase and sale of coffee. While support was provided for building productive capacities of growers (discussed below), no external support was provided from projects, NGOs, certification agencies or buyers for building their marketing capacities. All the cooperatives reported access to formal credit from international sources (e.g. Root Capital, Rotobank) and, in these cases, contracts for the sale of Fairtrade-certified coffee (and the related floor price) allowed for larger credit amounts. Local banks provided additional funds for the purchase of coffee from farmers and to cover operational costs until payments arrived for the previous harvest. Cooperatives expressed concern about the slow growth in sales for Fairtrade coffee and related challenges to sell additional containers of Fairtrade-certified coffee. Given the volumes sold, access to such credit was critical for maintaining operations. Cooperatives identified instances where relatively high international coffee prices translated into efforts

by Fairtrade buyers to reduce costs (e.g. Cooperative 4: buyers passing on transportation costs to the cooperative) and reduce volumes purchased (e.g. Cooperative 2: buyers condition the purchase of a single container of Fairtrade-certified coffee on the sale of multiple containers of non-certified coffee).

### *Supplier relations*

Cooperatives sourced from their members and in some cases non-members. Due to limited demand for any one certification label, the cooperatives engaged only a fraction of their supplier base in any one certification system. In all cases, cooperatives had expanded their engagement with farmers for the sourcing of coffee (Table 6). Cooperatives had expanded their membership rolls during the past five years, mainly because of their capacity to offer relatively high farm-gate prices.

Farmers join the cooperative because they know we pay higher prices (Manager of Cooperative 2, Honduras).

The producers are motivated to sell to us when we tell them about the price differentials they would receive (Manager of Cooperative 3, Nicaragua).

A recent and severe coffee rust outbreak also provided a strong incentive for farmers to seek out cooperatives in expectation of gaining access to technical assistance, credit, and inputs (e.g. fertilizer and rust-resistant coffee seedlings). However, the cooperatives in Nicaragua, Cooperative 3 and Cooperative 4, were no longer expanding their membership as demand had stagnated for Fairtrade coffee. The given supply of Fairtrade coffee generally exceeded demand in Nicaragua, as buyers of Fairtrade coffee began purchasing in markets with lower quality differentials but that still offered relatively high quality coffee, such as in Honduras and Peru. Thus, any expansion of the membership in cooperatives in Nicaragua threatened to increase business costs (e.g. provision of technical assistance and short-term credit to members) and dilute potential benefits for existing members (e.g. relatively high farm-gate prices).

For the three cooperatives established 10 or more years ago (CP1, CP2, CP3), the trend over the past five years had been to maintain current levels of farmer

**Table 6** Certificate holders' relations with farmers for sourcing coffee in the 2016/2017 harvest

<i>Business</i>	<i>Farmers that supply coffee</i>	<i>Change over the past five years</i>	<i>Stated reasons for the change</i>
CP1	478	More than doubled	Farmers receive higher coffee prices and technical assistance, particularly in combating rust
CP2	321	Only 72 members five years ago	Reorganization after the central cooperative failed and left large debts
CP3	420	Grew by 90 (27%)	Higher prices paid to members, who can earn 28% above the price on the local market
CP4	99	Tripled from 32 members	Higher prices, but limit membership to maintain existing benefits for members due to insufficient demand for Fairtrade



**Table 7** Farmers participating in each certification standard, percentage of the business's farmers in the standard and change in farmer participation from 2013 to 2017

<i>Certification</i>	<i>CP1</i>	<i>CP2</i>	<i>CP3</i>	<i>CP4</i>
<b>UTZ Certified</b>				
Number	99	321	398	99
% of total	20.7	100	94.8	100
Change	No change	No change	Many more	Many more
<b>Rainforest Alliance</b>				
Number	153	81	398	
% of total	32.0	25.2	94.8	N/A
Change	Many more	More	N/A	
<b>C.A.F.E. Practices</b>				
Number	184	86	84	99
% of total	38.5	26.8	21.1	100
Change	No change	More	No change	Many more
<b>Bird Friendly</b>				
Number	99		190	99
% of total	20.7	N/A	45.2	100
Change	No change		No change	Many more
<b>Fairtrade</b>				
Number	478	321	420	99
% of total	100	100	100	100
Change	More	More	More	Many more
<b>Organic</b>				
Number	170	98	336	69
% of total	35.6	30.5	80.0	69.75
Change	No change	More	More	Double

participation across most of their engagement in certification systems (Table 7). This reflects, among other things, slow to moderate growth in demand for certified coffees from the region over the recent past. Regarding Cooperative 4, the newest cooperative of the group, all engagement with certification systems took place in the past five years, leading to the reported major increase in member participation across all systems. Where notable exceptions existed (i.e. Cooperative 3's engagement with UTZ Certified and Cooperative 1's engagement with Rainforest Alliance), it is because the cooperative acquired (reacquired) the certification during the previous five years. In all three of these cooperative cases, there was a moderate increase in the participation in Fairtrade certification, in line with a moderate overall increase in membership over the past five years. With the exception of Cooperative 1, the cooperatives tended to include all of their suppliers under UTZ Certified. The cooperatives perceived value in maintaining broad coverage of their membership base for UTZ Certified, despite low demand, for promoting good production practices among suppliers. It may also reflect an expectation that demand for UTZ Certified coffee could increase in the short to mid-term.

In addition to higher farm-gate prices, the provision of technical assistance to coffee farmers was carried out by all of the cooperatives to secure needed supplies of

coffee beans. In addition to improving production practices, an effective technical assistance programme allows buyers to engage with farmers to implement new certification systems and monitor compliance with existing certifications. At the time of data collection, Central America was recovering from a major outbreak of coffee rust with devastating negative consequences for farmers (Avelino et al., 2015). Technical assistance in this context also offered farmers access to disease-resistant coffee varieties and new knowledge to reduce the severity and frequency of disease outbreaks in coffee fields. In Nicaragua, cooperatives had nine agronomists on their payroll for the provision of technical assistance. This allowed the cooperatives to pass on higher farm-gate prices derived, in part, from certification, and consequently secure access to high quality coffee in a competitive local market. In Honduras, both cooperatives covered all the costs of technical assistance for all but one of their technicians from their coffee sales. This reduced their capacity to pay significantly higher farm-gate prices to members (farm-gate prices for members were roughly in line with local farm-gate prices received by non-members), but allowed for greater control over the design of their technical assistance programmes and longer-term planning horizons. With the exception of Cooperative 1 in Honduras, the cooperatives had no team dedicated to the implementation and monitoring of the various certification systems. In reference to implementation of UTZ Certified, the manager of Cooperative 1 noted: ‘the most complicated aspect of implementing the certification standards is convincing producers to embrace change in their coffee production practices’. Technical assistance teams were likely spending as much or more time ensuring compliance with demanding certification requirements (e.g. maintaining detailed registers of inputs used on farm) as they were engaging with farmers to understand and respond to their needs.

### *Internal processes and strategies*

With few exceptions, the cooperatives primarily sought engagement in certification systems as part of a larger cooperative strategy to access new buyers and receive higher prices. They employed certification as a means to sell coffee to demanding buyers in a highly competitive international market environment. The certifications provided the fundamental basis for demonstrating quality and thus negotiating prices with buyers. Given that cooperatives tended to have excess capacity to supply any individual certification system, engagement with multiple systems increased the chances of selling a given container to a certified coffee buyer. In addition, having multiple certifications allowed the cooperatives to respond to changing buyer’s demand in terms of volume and certification label; the cooperatives were unable to reliably predict from one year to the next which certifications a certain buyer would demand or have an expectation of the amount they would demand. The stated desire to be better environmental stewards and improve production practices was also an important motivation for several of the cooperatives to adopt organic certification and for several cooperatives to adopt UTZ Certified and Rainforest Alliance certifications.

In addition to the stated objectives above, the cooperatives employed a multiple certification strategy as a means to signal coffee quality across multiple dimensions to potential buyers. This was noted by a cooperative leader:

Before, roughly 60 per cent of our coffee was sold to local buyers and mixed with other coffees for export. Only recently have we managed to sell all of our coffee directly in the international market. It's a lot of work to position our coffee in international market. We have invited buyers to come and see our work (Cooperative 2, Honduras).

They also aimed to demonstrate their capacity to promote best farming practices, conserve national resources, and improve overall farming/labour conditions.

The cooperatives made considerable investments over the past five years to upgrade infrastructure. Motivations tended to be mixed, but often included quality enhancement and certification compliance. As noted previously, certification and quality are often viewed as being closely associated with each other. In most instances, these investments would likely have occurred without certification; however, certification was a factor in making the investments sooner rather than later. Investments in milling infrastructure ranked highest among the cooperatives. Such investments offered increased control of the quality aspects of milling and compliance with standards systems related to water quality and labour conditions. Examples include roughly \$1.8 m and \$1 m invested for dry mills by Cooperatives 3 and 1, respectively. These investments were largely funded from a mix of loans and income from coffee sales (including the Fairtrade Premium).

Once the cooperatives have taken the risk in making large investments to obtain the certifications, not only in infrastructure but also in technical assistance and auditing, they were unwilling to abandon a certification. Despite the variation in sales across certified coffees (including the extreme cases where no sales of a given certification were reported for the 2016/2017 coffee year), they maintained all their certifications in the hope that their investments, their bet on certification, would eventually pay off. All the cooperatives stated that they planned to continue with their current set of certifications over the next five years. In particular, the cooperatives were all certain they would maintain their Fairtrade and organic coffee certifications because of the price premiums they received for them.

## Summary

The key question addressed in this study is whether the coffee cooperatives that engage downstream with international coffee buyers and upstream with coffee farmers are able to grow and develop their operations based on engagement with certification systems. This research offers some practical insights for the development of certification systems and speciality markets by focusing on the experiences of four cooperatives in Central America – a leading provider of certified coffee to US and European markets, which has faced various external shocks to coffee production and marketing in recent years.

Overall, how important was certification to cooperative operations and strategy? Evidence suggests that certification was critical for long-term growth and development, but that strong capacities are needed to engage with multiple systems and respond to the vicissitudes of international buyers. Certification gave the cooperatives capacity to negotiate directly with buyers based on quality and other special attributes, and respond to fluctuations in demand for any one certification system. This was especially important in Honduras where cooperatives were relatively new to the direct marketing of their coffees. Perceived reductions in demand for Fairtrade, organic, and C.A.F.E. Practices also contributed to the adoption of other certification systems such as UTZ Certified and Rainforest Alliance – certification systems which have typically been associated with larger-scale coffee businesses in the region. Price premiums derived from the sale of certified coffees, especially Fairtrade and organic-certified coffees, provided the major source of funds for investments in infrastructure and the provision of services to farmers. In Nicaragua, part of the price premiums received from buyers were passed down to farmers in the form of higher farm-gate prices. This was enabled in part by project support which covered the expenses for technical assistance – a critical activity to ensure compliance with certification. In Honduras, price premiums from the sale of coffee were generally reinvested in the business, including to cover operational expenses, certification costs, and technical assistance.

In general, engagement with multiple certification systems facilitates the efforts of cooperatives in Central America looking to compete in speciality coffee markets. Relatively low production volumes, coupled with the need to respond to members' demands for competitive farm-gate prices and services meant that cooperatives sought to sell every container as high above conventional market prices as possible. At the same time, most cooperatives reported stagnant or declining demand for Fairtrade coffee – the major source of revenue for the cooperatives. Cooperatives coped in different ways. Several capped membership levels, thus ensuring that the benefits of higher prices were spread among fewer members. They engaged with NGOs to subsidize their activities with farmers and engaged with non-members to purchase conventional coffee and coffees with less demanding certifications. Another way they responded was through engagement with as many certification labels as possible. Multiple certification provided the clearest possible signal of quality control and commitment to social and environmental responsibility to prospective buyers. Having already implemented organic and Fairtrade certifications, the cooperatives had the basic infrastructure in place to add additional certifications. The sale of just one container of certified coffee under Rainforest Alliance or UTZ had the potential to justify the additional expenses.

From a critical perspective, the results suggest that cooperatives engaged with multiple certification systems mainly for the purpose of achieving short-term market advantage. Long-term systemic change in how cooperative members produce coffee and how cooperatives engage with suppliers is unlikely to occur without other types of interventions (e.g. agreement among international buyers, regulatory action). Competition in the speciality coffee market has been increasing

over recent years and countries such as Ethiopia, Peru, and Honduras have dramatically increased their export volumes (Tulet, 2010), even as international coffee prices have been relatively low. In this context, multiple certification communicated quality to international buyers and in doing so, provided a basis for businesses in producing countries to negotiate higher prices. Due to limited demand for any one certification label, cooperatives engaged a fraction of their supplier base in any one certification system. When no coffee produced under a given label was sold, cooperatives maintained the certification to demonstrate overall quality commitments and maintain the option for future sales under the label. Even in the case of Fairtrade, which covers all members of a given cooperative, cooperatives segmented their supplier base: purchasing coffee on Fairtrade terms only from members and purchasing coffee from non-members to sell as UTZ Certified or without certification.

The study allows practical recommendations to be made for certification agencies, NGOs, and others looking to reduce the costs and uncertainties for cooperatives interested or already engaged in certification or other speciality markets. Cooperatives will benefit from engagement by certification agencies on how to actually implement the standards. Results showed that each cooperative had to develop its own methods and tools for implementation. Collaboration is needed among coffee businesses, certification agencies, and farmers to identify the lessons learned in the implementation of the standards, options for responding to changes in a given standard, and the implementation of multiple certifications in the most efficient and effective manner. This would reduce the potentially effective, but undoubtedly costly, learning-by-doing approach followed by cooperatives. Certification agencies need to better coordinate among themselves to standardize reporting requirements and audits across certification systems, recognizing the similarities between them and reducing costs for implementing businesses. Cooperatives, especially less mature ones, will benefit from access to credible evidence on the potential costs and benefits of acquiring a given certification system based on the context of a business (i.e. type of business, management capacity, production capacity, access to inputs and services). This would include analysis of the past sales performance of cooperatives and other types of smaller coffee businesses and insights into options for improved marketing. Finally, certification agencies should play a stronger role in facilitating cooperatives' access to local service providers for the implementation of the most challenging standards and overall improvement of coffee operations.

## References

- Avelino, J., Cristancho, M., Georgiou, S., Imbach, P., Auilar, L., Bornemann, G., Laderach, P., Anzueto, F., Hruska, A. and Morales, C. (2015) 'The coffee rust crises in Colombia and Central America (2008–2013): impacts, plausible causes and proposed solutions', *Food Security* 7(2): 303–21 <<http://dx.doi.org/10.1007/s12571-015-0446-9>>.
- Bacon, C. (2004) 'Confronting the coffee crisis: can Fairtrade, organic, and specialty coffees reduce small-scale farmer vulnerability in Northern Nicaragua?' *World Development* 33(3): 497–511 <<http://dx.doi.org/10.1016/j.worlddev.2004.10.002>>.

- Bacon, C., Mendez, V., Gomez, M., Stuart, D. and Flores, S. (2008) 'Are sustainable coffee certifications enough to secure farmer livelihoods? The millennium development goals and Nicaragua's Fairtrade cooperatives', *Globalizations* 5(2): 259–74 <<http://dx.doi.org/10.1080/14747730802057688>>.
- Barham, B., Callenes, M., Gitter, S., Lewis, J. and Weber, J. (2011) 'Fair trade/organic coffee, rural livelihoods, and the "agrarian question": Southern Mexican coffee families in transition', *World Development* 39(1): 134–45 <<http://dx.doi.org/10.1016/j.worlddev.2010.08.005>>.
- Beuchelt, T. and Zeller, M. (2011) 'Profits and poverty: certification's troubled link for Nicaragua's organic and fair trade coffee producers', *Ecological Economics* 79(7): 1316–24 <<http://dx.doi.org/10.1016/j.ecolecon.2011.01.005>>.
- Blackman, A. and Naranjo, M. (2012) 'Does eco-certification have environmental benefits? Organic coffee in Costa Rica', *Ecological Economics* 83(2012): 58–66 <<http://dx.doi.org/10.1016/j.ecolecon.2012.08.001>>.
- Boiral, O. and Gendron, Y. (2010) 'Sustainable development and certification practices: lessons learned and prospects', *Business Strategy and the Environment* 20(5): 331–47 <<http://dx.doi.org/10.1002/bse.701>>.
- Carlson, K., Heilmayr, R., Gibbs, H., Noojipady, P., Burns, D., Morton, D., Walker, N., Paoli, G. and Kremen, C. (2017) 'Effect of oil palm sustainability certification on deforestation and fire in Indonesia', *Proceedings of the National Academy of Sciences* [online] <<http://dx.doi.org/10.1073/pnas.1704728114>>.
- Donovan, J. and Poole, N. (2014) 'Changing asset endowments and smallholder participation in higher value markets: evidence from certified coffee producers in Nicaragua', *Food Policy* 44: 1–13 <<http://dx.doi.org/10.1016/j.foodpol.2013.09.010>>.
- Foundjem, D., Donovan, J., Stoian, D. and Degrande, A. (2016) *Baseline for Assessing the Performance of Fairtrade Cocoa in Ghana*, Nairobi: World Agroforestry Centre.
- Lernoud, J., Potts, J., Sampson, G., Voora, V., Willer, H. and Wozniak, J. (2018) *The State of Sustainable Markets 2018: Statistics and Emerging Trends*, Geneva, Switzerland: International Trade Centre.
- Minten, B., Dereje, M., Engida, E. and Tamru, S. (2018) 'Tracking the quality premium of certified coffee: evidence from Ethiopia', *World Development* 101: 119–32 <<http://dx.doi.org/10.1016/j.worlddev.2017.08.010>>.
- Poole, N. and Donovan, J. (2014) 'Building cooperative capacity: the specialty coffee sector in Nicaragua', *Journal of Agribusiness in Developing and Emerging Economies* 4(2): 133–56 <<http://dx.doi.org/10.1108/JADEE-01-2013-0002>>.
- Raynolds, L. (2016) 'Fairtrade labour certification: the contested incorporation of plantation and workers', *Third World Quarterly* 28(7): 1473–92 <<http://dx.doi.org/10.1080/01436597.2016.1272408>>.
- Reinecke, J., Manning, S. and Von Hagen, O. (2012) 'The emergence of a standards market: multiplicity of sustainability standards in the global coffee industry', *Organization Studies* 33(5/6): 789–812 <<http://dx.doi.org/10.1177/0170840612443629>>.
- Ruben, R. and Fort, R. (2011) 'The impact of Fairtrade certification for coffee farmers in Peru', *World Development* 49(3): 570–82 <<http://dx.doi.org/10.1016/j.worlddev.2011.07.030>>.
- Ruben, R. and Hoebink, P. (2015) *Coffee Certification in East Africa: Impact on Farmers, Families and Cooperatives*, Wageningen, Netherlands: Wageningen Academic Publishers.
- Taylor, C., Balmford, A., Buchanan, G., Butchart, S., Ducharme, H., Green, R., Milder, J., Sanderson, F., Thomas, A., Vickery, J. and Phalan, B. (2016) 'Global coverage of agricultural

- sustainability standards and their role in conserving biodiversity', *Conservation Letters* 10(5): 610–8 <<http://dx.doi.org/10.1111/conl.12314>>.
- Trafialek, J. and Kolanowski, W. (2017) 'Implementation and functioning of HACCP principles in certified and non-certified food businesses: a preliminary study', *British Food Journal* 119(4): 710–28 <<http://dx.doi.org/10.1108/BFJ-07-2016-0313>>.
- Tulet, J.C. (2010) 'Peru as a new major actor in Latin American coffee production', *Latin American Perspectives* 37(2): 133–41 <<http://dx.doi.org/10.1177/0094582X09356962>>.
- Valkila, J. and Nygren, A. (2010) 'Impacts of Fairtrade certification on coffee farmers, cooperatives, and laborers in Nicaragua', *Agricultural and Human Values* 27(3): 3211–333 <<http://dx.doi.org/10.1007/s10460-009-9208-7>>.
- Van Rijsbergen, B., Elbers, W., Ruben, R. and Njuguna, S. (2016) 'The ambivalent impact of coffee certification on farmers' welfare: a matched panel approach for cooperatives in central Kenya', *World Development* 77: 277–92 <<http://dx.doi.org/10.1016/j.worlddev.2015.08.021>>.
- Vellema, W., Casanova, A.B., Gonzalez, C. and D'Haese, M. (2015) 'The effect of specialty coffee certification on household livelihood strategies and specialization', *Food Policy* 57: 13–25 <<http://dx.doi.org/10.1016/j.foodpol.2015.07.003>>.
- Weber, J. (2011) 'How much more do growers receive for Fair Trade-organic coffee?' *Food Policy* 36: 678–85 <<https://doi.org/10.1016/j.foodpol.2011.05.007>>.
- Wilson, B. (2010) 'Indebted to Fairtrade: coffee and crisis in Nicaragua', *Geoforum* 41(1): 84–92 <<http://dx.doi.org/10.1016/j.geoforum.2009.06.008>>.