

Partnerships in Fairtrade coffee: a close-up look at how buyers and NGOs build supply capacity in Nicaragua

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This paper examines efforts by buyers and NGOs to build the supply of Fairtrade coffee from the Nicaragua-based cooperative Soppexcca following the coffee crisis. Support was aimed at transforming Soppexcca into a viable business, able to respond to the needs of its coffee-farming members. Results show that Soppexcca made significant gains, including expansion of infrastructure, growth in membership, and increased financial stability. However, important issues remained, related to democratic governance, future growth and stability, and the provision of services. Results suggest that advances in building cooperatives do not easily translate into increased capacities at the household level. While some important gains were detected, in general, producers struggled to intensify coffee production and take full advantage of their access to preferential markets. This paper makes a plea for deeper discussions about how buyers and NGOs can more effectively contribute to building the supply of high-quality Fairtrade coffee, and the need for increased coordination and mutual learning as part of the process.

Keywords: Fairtrade, coffee, smallholders, cooperatives, development practice, Nicaragua

FAIRTRADE COFFEE IS A BIG BUSINESS, the growth of which shows no sign of slowing down. In 2010, approximately 88,000 tonnes of Fairtrade coffee were consumed globally – nearly a threefold increase since 2005 (FLO, 2011). In the United States, consumption of Fairtrade coffee increased by 50 per cent each year during the 10-year period ending in 2010 (Transfair, 2010). In the United Kingdom, Fairtrade accounts for roughly 25 per cent of the roast and ground market by value, with more than 120 companies licensed to market (Fairtrade Foundation, 2012). Fairtrade coffee is offered in major supermarkets throughout Europe and North America, and includes some of the largest corporate players in the coffee sector. The demand for Fairtrade stems, in part, from consumers' concerns over social and environmental issues in the global economy. With its rise in popularity, as well as increased competition from other sustainability labels, many buyers and retailers have emphasized high quality to differentiate themselves in an increasingly crowded market segment.

Fairtrade structures how Northern-based coffee buyers interact with cooperatives and their members in producing countries. At a minimum, buyers agree to

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provide cooperatives with guaranteed prices and an additional payment for locally defined projects. In many cases, however, deeper buyer–cooperative relationships evolve within the Fairtrade framework, reflecting shared values and organizational commonalities, as well as buyers' need to increase access to high-quality coffee (Raynolds, 2009). Such partnerships may feature security in contracting, pre-financing, technical assistance, additional price premiums for quality, and joint strategy formulation. In Nicaragua, for example, well-established Fairtrade cooperatives and a US buyer joined forces to build cupping laboratories for assessing coffee quality before export and to organize an umbrella organization that promoted high-quality certified coffee at the national level (Bacon, 2013). Given the risks involved, buyers are more likely to invest in partnerships with more established cooperatives with professional management.

Cooperatives are positioned in the chain between Northern-based coffee buyers and smallholder coffee producers. They maintain a portfolio of coffee buyers and establish links with Fairtrade support organizations, as well as seek out partnerships with development organizations. In Nicaragua, where the state has limited presence in the coffee sector, cooperatives also play an important role in supporting their members in the expansion and intensification of high-quality coffee production. In their efforts to grow into viable businesses, cooperatives often seek to build their infrastructure, professionalize their management, and increase their technical capacities in coffee production and processing. NGOs and other development organizations have invested considerable resources in the promotion of coffee cooperatives in Latin America and elsewhere. There is a general assumption that strong cooperatives are well-positioned to support their members in the sustainable intensification of coffee production (e.g. by providing technical assistance, credit, and production inputs), and thus contribute to poverty and conservation goals. Such support to coffee cooperatives formed a major element of donor strategies for addressing the coffee crisis (1999–2005) in Central America (Varangis et al., 2003).

This article explores how buyers and NGOs in the international coffee chain supported the Nicaragua-based cooperative Soppexcca in its effort to source high-quality coffee from smallholder coffee producers. Soppexcca was organized in 1997 and, at the time of data collection, had about 500 members. Soppexcca's membership more than doubled during the early years of the coffee crisis, as coffee producers sought higher coffee prices. In addition to providing access to certified markets, Soppexcca offers annual credit for coffee production, multiyear credit for strategic coffee-related investments, and technical assistance. In 2009, all of Soppexcca's coffee exports were Fairtrade certified. In relation to Soppexcca, we examine:

- how buyer investments and NGO interventions contributed to Soppexcca's overall development and its ability to engage in long-term chain partnerships; and
- how Soppexcca, with buyer and NGO support, contributed to building the capacity of its members to deliver high-quality coffee.

Case study context

Buyer interactions with Soppexcca's predecessor cooperative, Jiprocoop, in the late 1990s played a critical role in the organization of Soppexcca and the formation of its management structure. In 1997, after five years exporting Fairtrade coffee, Jiprocoop declared that it would not be able to meet its contractual obligations for the delivery of green coffee. During the previous year, Jiprocoop had received US\$640,000 in 'pre-financing' from six buyers (approximately 60 per cent of the value of the contracts). However, poor oversight of the cooperative's administration permitted theft of the pre-financing by the cooperative's manager and the export committee (Denaux, 2008). Without the pre-financing, Jiprocoop was unable to purchase coffee from its members and thus was unable to repay the pre-financing. Jiprocoop was declared insolvent in 1997.

Five of the six European debt-holding coffee buyers offered a solution for repaying the debt. A new corporate entity would be created which would hold the debt of the defunct Jiprocoop, with which the buyers would continue to trade. This offered the prospects of recovering the losses incurred by mismanagement, ensuring supplies of the high-quality coffee, and at the same time supporting a development agenda around smallholder coffee production. Thus was created Soppexcca in 1997, a firm in which the buyers would have a strong management hand, constituted as a 'corporation'. The corporate structure enabled efficient and professional governance in the interests of shareholders first rather than other stakeholders such as the coffee growers.

Soppexcca and its members gradually repaid its debt obligations and expanded commercial relations with coffee buyers in the United States. In 2004 the buyer/owners allowed Soppexcca to reorganize itself as a cooperative with producer-members' interests paramount, but retaining the professional management. The reversion to the cooperative form post-recovery reflected a desire to return the organization to the hands of the member-stakeholders, to benefit from the tax-free status offered to cooperatives, and to receive increased support from development organizations. At the time of data collection, various European and US coffee buyers continued to provide no-interest credit to Soppexcca for the purchase of coffee from its members.

NGO interventions also played an important role in the development of Soppexcca's supply base. Between 2000 and 2009, Soppexcca received financial and technical support from NGOs and donors totalling roughly \$2 m from nine NGOs and projects. In several cases, multiple interventions were carried out by the same NGO. Support aimed to build a credit programme (including multiyear credit for coffee rejuvenation and expanding production areas), provide humanitarian assistance, expand infrastructure and equipment, and finance technical assistance by Soppexcca.

Methods

Data collection and analysis focused on assessing the productive capacity of Soppexcca and its members, and the role of NGO and buyer partnerships in helping

to build their capacity. Key informant interviews, household surveys, and secondary information were used to assess capacities and changes in capacities following an intense period of interventions by NGOs and buyers. The assessment covers the period between 2004 and 2008. In some cases, a shorter timeframe was used, for example a three-year period was used for reporting purchases of fertilizer (recognizing the limitations of recall for more routine purchases). In reporting coffee production and sales, the period was extended to 2009 to capture production that was sold in early 2009.

At the cooperative level, we assessed: 1) governance structures; 2) administrative capacity; and 3) financial viability. At the household level, we assessed: 1) productive base (area under coffee; access to fertilizers, as a proxy for soil fertility; and investments in tools, equipment and machinery); 2) coffee production practices; and 3) credit access and income flows. Quantitative and qualitative data were collected to determine these changes, while mainly qualitative information was used to understand their relevance and the underlying reasons.

Data collection at the cooperative level relied upon key informant interviews and the collection of secondary information. The Soppexcca staff interviewed included the directors of management, extension, and credit, and members of the board of directors. Staff members were consulted on various occasions during the data collection period. In addition, interviews were carried out with Soppexcca's buyers, local coffee buyers, NGO supporters, and certification agencies. Soppexcca supplied information on membership, coffee exports, credit provision, relations with buyers, and overall business strategy. Information provided by Soppexcca was triangulated with its members during household interviews (see below).

At the household level, 292 coffee-producing households were interviewed (about 95 per cent of the membership of 11 of Soppexcca's 18 base cooperatives); 32 per cent (n=71) of the sampled households were certified organic. Insights into attribution were gained by asking respondents the extent to which they considered that changes were attributable to engagement with Soppexcca. In other cases, attribution insights were gained by singling out the most probable causes of the change from various potential causes. It was not possible to identify the effects of any one intervention or partnership on local capacities, thus attribution refers to the set of interventions and interactions that were channelled through Soppexcca.

Understanding the factors behind variation in outcomes among households constituted an important element of this study. Households were clustered according to: 1) area under coffee production in the 2008–2009 coffee-growing year; and 2) percentage of total household income derived from off-farm sources in 2008. A three-cluster solution emerged from this analysis, with household livelihood descriptors and cluster characterization as follows:

- *Diversified small-scale farmers (DSF)* (n=77). Relatively small area under coffee production; high dependence on income derived from off-farm labour activities (often as wage labour for other, usually larger, farmers); some contribution from other crops.

- *Specialized small-scale farmers (SSF)* (n=162). Relatively small area under coffee production; majority of income derived on-farm from coffee, with contributions from banana, citrus, beans and other products.
- *Specialized large-scale farmers (SLF)* (n=53). Relatively large area under coffee production; majority of income derived from coffee, with contributions from livestock, banana, citrus and other products.

Unless otherwise indicated, coffee quantities are presented as pre-dried parchment coffee: the state of coffee when it is sold by producers to buyers such as Soppexcca (45 kg of export green coffee are commonly processed from roughly 90 kg of pre-dried parchment coffee produced by farmers in north-central Nicaragua).

Results

Outcomes for Soppexcca

Governance structures. In 2004, Soppexcca changed from a corporation to a cooperative and its elected board of directors met for the first time. Evidence during the assessment period indicates that the board faced major challenges in effective governance. One reason was insufficient skills in business and financial administration, combined with limited access to information. A former board president noted that he received no prior training in basic business or in cooperative management. What skills and knowledge he acquired while on the board came from trial and error. A similar experience was reported by a former member of the Oversight Committee – the committee that reviews the financial operations of the cooperative. Informants noted that the board and the Oversight Committee generally did not have access to timely financial information, largely because of a lack of information rather than inaccessibility of information. Interviews highlighted the board's reluctance to question, debate or probe Soppexcca's management regarding strategic decisions and investments. According to one former board member, 'Any effort to discuss the decentralization of Soppexcca's administration drew criticism from the other board members because it was perceived to show a lack of respect for [the professional manager].' It is worth mentioning that no evidence was found to suggest that Soppexcca's management thwarted greater inclusion of members in cooperative governance. Rather, our findings suggest that greater inclusion was not a priority.

Administrative and marketing capacities. Soppexcca benefited from strong managerial capacities prior to the period. A professional manager held the cooperative together during the worst of the coffee crisis, negotiating new contracts with buyers and obtaining NGO assistance. Interviews with buyers highlighted the ability of Soppexcca's management to build relations based on trust and mutual respect. According to one buyer, 'We feel a special trust with Soppexcca. They kept paying off the debt even though they didn't have to.' Trust was reflected in tangible ways. For example, in 2009, when Soppexcca announced its difficulty capturing its members' coffee due to high levels of local competition during the harvest season, interviewed buyers agreed to adjust their price formula so that prices offered by Soppexcca

were more competitive with local farm-gate prices. Another buyer noted that 'if Soppexcca has to request an adjustment in their price, then there is always a good and transparent reason'. During interviews with buyers, concern was expressed over the high level of dependence on the manager for most business functions. However, neither buyers nor Soppexcca's NGO partners seemed aware of the limited participation of members in Soppexcca's governance.

Prior to the assessment period, Soppexcca enjoyed strong ties with coffee buyers, NGOs, and its membership base. During the period, Soppexcca forged new ties with US coffee buyers, while maintaining the strong relations that existed previously. The 2008–2009 harvest was sold to seven buyers: five from Europe purchased 59 per cent of the total volume exported and two from the United States purchased the remaining 41 per cent. The five European buyers had purchased about the same amount from Soppexcca every year since 1999. US buyers began to purchase coffee from Soppexcca in significant volumes beginning with the 2004 harvest. None of the interviewed buyers reported major problems with Soppexcca related to the quality of coffee delivered or compliance with contractual terms (including repayment of pre-financing). One buyer regarded Soppexcca as the most reliable among the 10 cooperatives in Latin America from which it purchased coffee.

Physical assets and income flows. Prior to the period, Soppexcca's physical capital was basic, consisting mainly of an office and warehouse space. By the end of the period, Soppexcca's stock had grown to include a dry-coffee processing plant, 11 offices for base cooperatives, a plant for the production of chicken manure fertilizer, two coffee houses, and a cupping lab. Purchase of the dry-coffee processing plant required long-term loans, grants, and the expenditure of cooperative earnings. The plant, which began operations in 2010, is expected to provide increased control of the production process (improved quality) and an additional income stream for Soppexcca, thus offering an option for reduced dependence on donor support in the future. The fertilizer plant was not in operation during the period due to uncertainties regarding the use of chicken manure from large-scale commercial broiler farms in organic coffee production. The newly constructed offices for base cooperatives offer the potential for greater consolidation of Soppexcca's base cooperatives, which have yet to play a major role in the delivery of Soppexcca's services (e.g. credit, technical assistance) or in taking the initiative to offer additional services (e.g. transportation, collective purchase of inputs).

Soppexcca's yearly income flows vary considerably based on negotiated prices and production volumes. Table 1 shows Soppexcca's estimated income after paying growers and export and processing expenses between 2005 and 2008. Data on costs for operating Soppexcca's administration were not available. However, the data in Table 1 shows that relatively little was available for covering salaries and capital investments. Key informant interviews with Soppexcca staff confirmed that project funds covered much of Soppexcca's administration costs and strategic investments. Given the recent major investments in the dry-processing mill, it is unlikely that, in the mid-term, Soppexcca will be able to operate without continued subsidies from NGOs and projects. That said, an efficient dry-processing mill has the potential

Table 1 Income and expenses (US\$) from Fairtrade coffee sales by Soppexcca, 2005–2008

	<i>Total sales (45 kg green coffee)</i>	<i>Weighted average price</i>	<i>Total income</i>	<i>Purchase of coffee from growers</i>	<i>Export and processing expenses</i>	<i>Income after grower, export, and processing expenses</i>
2005	12,242	118.5	1,450,026	1,224,200	140,538	85,288
2006	9,594	133.2	1,277,760	1,160,840	110,136	6,784
2007	5,935	136.1	807,770	718,135	68,134	21,501
2008	10,155	159.5	1,619,340	1,320,150	116,579	182,611

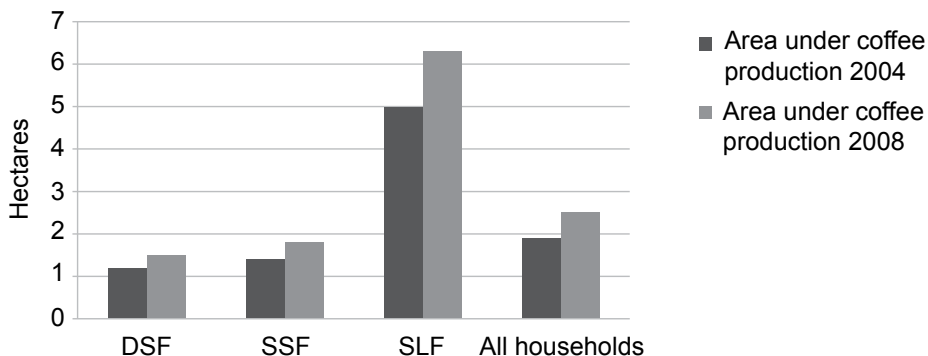
Source: authors' calculations, based on data provided by Soppexcca

to reduce export and processing expenses and to open a new income source (for example, provide milling services to other growers/cooperatives). Its extension and credit programmes remain dependent on grants.

Soppexcca began and ended the period with a relatively high level of debt. However, during the period, it proved its capacity to repay debt and build trust with creditors. Soppexcca began the assessment period with a debt to coffee buyers of nearly \$500,000 and limited working capital or investment capacity. During the period, the cooperative repaid its debt from funds obtained from the export of coffee and with contributions from members (in the form of forgone social premiums). Shortly after doing so, however, it accumulated \$280,000 in new debt for the purchase of the dry-coffee processing plant. On an annual basis, Soppexcca received loans from buyers and Fairtrade lending organizations, totalling roughly \$700,000 in 2009, which allowed Soppexcca to cover advance payment to its members for coffee delivery.

Outcomes for Soppexcca's members

Productive base. The total area under coffee production increased by nearly 30 per cent between 2004 and 2008, from 570 ha to 736 ha (Figure 1). The highest change was

**Figure 1** Change in area under coffee production between 2004 and 2008, by cluster

recorded by households from the SSF cluster (31 per cent), although changes only slightly smaller were recorded for households from the other clusters. Household interviews identified a mix of factors that allowed expansion of the coffee area, which typically included multiyear credit from Soppexcca. For households in the DSF and SSF clusters, growth in the area under coffee production likely reflected efforts to revive coffee area lost during the coffee crisis (due to neglect or removal for the planting of basic grains).

An understanding of the local context provides insights into why households from the DSF were the least likely to build their natural capital endowments, despite the expansion of Soppexcca's services and improved conditions for coffee marketing. For members of two base cooperatives, which together made up nearly 33 per cent of the DSF cluster, a history of struggle to obtain, manage, and retain their collectively owned coffee plantations impeded investments in natural capital. In one case, internal divisions among community members over how to produce and market the coffee for their collectively owned plantation resulted in 13 years of limited investment in coffee production. In 2003, individual land titles were obtained, with the help of Soppexcca. In another case, households linked through the collective ownership of a former state-owned plantation incurred approximately \$80,000 in debt during the late 2000s for legal fees to fight off conflicting claims to their land. Until the debt is paid in full, the land title is being held in the custody of the legal representation.

The ability of households to make efficient use of their land under coffee production depends, in part, on their timely access to quality fertilizers. Coffee production mines nutrients from the soil, which, if not replaced through organic or inorganic fertilizers, results in gradually declining productivity (Van der Vossen, 2005). The average coffee yield in Nicaragua is 1,383 kg/ha (Flores et al., 2002). Evidence from long-term experiments in Nicaragua suggests that shade-grown organic and conventional coffee production in the country can reach productivity levels of 1,487 kg/ha and 1,927 kg/ha, respectively, with moderate levels of fertilization (Haggard et al., 2011). However, the average productivity for the sampled organic and conventional producers, at 726 kg/ha and 1,278 kg/ha, fell below these estimates. Among households in the DSF cluster, results were more discouraging, at 552 kg/ha for organic producers and 582 kg/ha for conventional producers. This suggests that lack of access to fertilizers remains a barrier to sustaining natural capital.

Among households producing conventional coffee, the relatively high costs of inorganic fertilizer presented a challenge to replenishing soil nutrients lost to coffee production among cash-strapped producers. Data on inorganic fertilizer use (complete and urea) were collected from 152 households; 22 households, or 14 per cent of those sampled, reported no purchase of inorganic fertilizer during the 3-year period between the 2005 and 2008 coffee growing years. Among DSF households, approximately 42 per cent applied at least one 45-kg bag of complete fertilizer in the 2008–2009 coffee growing year, while 18 per cent applied at least one bag of urea. The number of DSF households that applied inorganic fertilizer and urea is significantly higher in 2008 than for the previous two years. Despite the overall increase in fertilizer application, however, most households in the DSF cluster did not reach

the estimated nitrogen threshold (39 kg of nitrogen/ha) for achieving reasonable productivity levels. Households identified short-term credit from coffee buyers as the main factor contributing to fertilizer purchases.

Improvements in infrastructure at the household level played a major role in Soppexcca's strategy for improving coffee quality. Physical capital for wet milling includes the construction/refurbishment of mill enclosures, construction/refurbishment of fermenting tanks or the purchase/repair of machines for depulping and pumping water. The average investment by households in the DSF cluster was \$198 during the four-year period, skewed upward by a few households; among the 72 households in the cluster, only 12 (17 per cent) reported cash investments for improved wet milling (Figure 2). Investments by SSF, while significantly higher than those of the DSF cluster, remained low at \$593. Moreover, 70 SSF households, or nearly half the cluster, reported no cash investments during the period. Investments by SLF households, at nearly three times those of SSF households, showed considerably less variation within the cluster. Credit by Soppexcca contributed \$97,847 to investments in wet milling infrastructure and machinery, or roughly 48 per cent of total reported household expenditure.

Households also reported acquisitions of machinery, tools, and infrastructure for agricultural production, in addition to those used for wet milling during the four-year period between 2004 and 2008. The extremely low investment by households in the DSF cluster stands out, at \$91 (Figure 2); investments they made were generally confined to basic tools for production of coffee and basic grains. Similar to experiences in the building of physical capital for wet milling, households in the SSF cluster achieved higher investments than their DSF counterparts, but the absolute level of investments was low. In general, findings suggest that households from DSF and SSF clusters struggled to build their physical capital endowments for farm production compared with investments by SLF households, which included relatively large purchases of mechanized machinery for the production of coffee, livestock, and off-farm business activities.

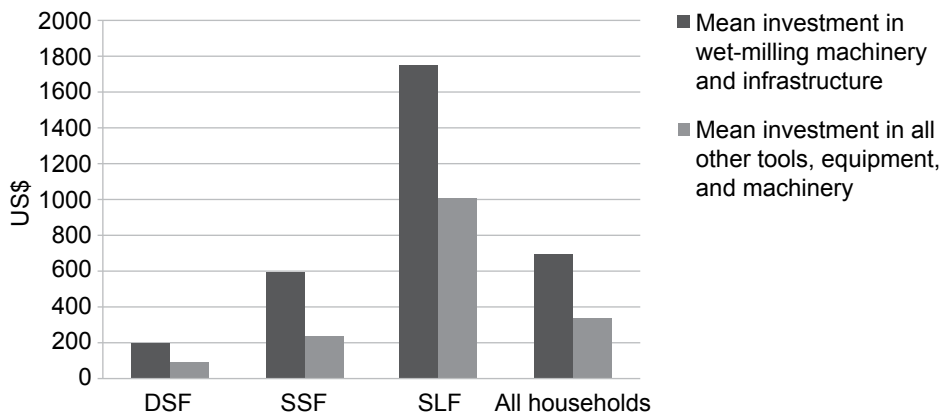


Figure 2 Purchase of tools, equipment, and machinery, 2004 to 2008

Production practices. Implementation of good practices for coffee was an important focus of Soppexcca's technical assistance. Results were mixed. On one hand, most households increased their skills for reducing environmental contamination and providing higher-quality coffee. For example, the majority of households reported the application for the first time of select coffee harvesting during the period (54 per cent), as well as the use of environmentally friendly techniques for dealing with wastewater from wet milling (66 per cent). However, circumstantial evidence suggested that skills for proper plantation management, including the pruning of coffee bushes and shade trees, which play an important role in determining coffee productivity, disease resistance, and overall soil health, changed relatively little in response to Soppexcca-provided technical assistance.

Traditionally smallholders in Nicaragua do not practise regular pruning or other forms of improved crop management on their coffee plantations. Soppexcca aimed to facilitate the modernization of members' crop management through its training and technical assistance programme. However, according to Soppexcca staff, efforts to encourage more intensive tree management for coffee production have been frustrated by: 1) a general reluctance by producers to trim or stump coffee trees that are productive; and 2) the limited ability of Soppexcca staff to engage intensively with producers for upgrading their crop management skills (interview R.R., 24 November 2009). Not mentioned, but likely a major contributing factor to the limited uptake of improved crop management, are the potentially high trade-offs involved in shifting labour and other resources to coffee production from other livelihood activities (see Stoian et al., 2012, for a discussion in the context of value chain development).

A basic condition for modernizing coffee management is the development of the required skills. As the only provider of technical assistance for most of the households, Soppexcca had an important role to play in this respect. Households reported their perceptions on the utility of technical assistance for coffee production between 2007 and 2008: 44 percent (n=129) of the households reported being dissatisfied or highly dissatisfied with technical assistance provision. Household responses shed light on the nature of the problem:

- 'We were visited once in 2008, but the extensionist didn't provide technical advice; he arrived to inform us of a meeting at the cooperative'.
- 'I lack advice when I need it: on one occasion I requested a visit from the extensionist because the coffee berries were falling off the branches, but he never came'.
- 'Visits are only for estimating the harvest – the extensionist does not know my coffee plantation. He sends others from the community to assist me and does not provide advice'.
- 'Sometimes he indicated which product I should use, but the extensionist did not indicate the doses and I burned the plants'.

There is little doubt that the design and implementation of an effective technical assistance programme aimed at resource-poor farmers is a complex undertaking. Soppexcca's assistance programme was relatively young at the time of data

collection and fully dependent on external funding. Over time, Soppexcca is likely to strengthen its capacity to deliver more effective services. This may involve a deeper understanding of the needs of different types of farmers, better diagnostic and decision-making tools, as well as a greater coordination within Soppexcca (i.e. linking technical assistance with credit).

Credit access and income flows. Most households (57 per cent) reported no access to short-term credit prior to joining Soppexcca. During the assessment period, opportunities for obtaining short-term credit increased, in part due to linkages with Soppexcca, with only 12 per cent of sampled households reporting no access to credit. Among households that received short-term credit, most ($n=160$, 55 per cent) reported Soppexcca as their only source of credit. Other credit sources included specialized lending organizations, coffee buyers, NGOs, and, to a lesser extent, informal lenders and commercial banks. Collateral requirements varied. While the terms offered by Soppexcca were relatively favourable, the average amount provided was small. For example, in the 2007–2008 coffee growing year, the mean annual credit amount for DSF households was \$197, with \$390 for SSF households, and \$1,805 for SLF households. Even for households with relatively small coffee holdings, Soppexcca-provided credit is unlikely to cover variable production costs, much less facilitate more strategic investments in asset building.

Before discussing income benefits from Fairtrade coffee sales, a brief discussion of ‘side-selling’ is warranted (i.e. the diversion of sales from formal to informal channels). In general, Soppexcca members have price and other incentives to sell their first-quality coffee to Soppexcca. Given that Soppexcca purchases only first-quality coffee, it is logical that members will sell their second-quality coffee (10–15 per cent of total harvest) to local buyers. However, results suggest that members divert a significant amount of first-quality coffee to buyers other than Soppexcca. For organically certified households, the mean percentage of coffee sold to Soppexcca between 2008 and 2009 was 73 per cent, while for conventional producers, the mean percentage was 57 per cent (Figure 3). Across all the clusters, the most common response was insufficient liquidity to cover production expenses for harvest ($n=31$). This is especially true for the SLF households, which tended to purchase more inputs and rely on hired labour. In addition, households from one community mentioned the importance of strong relationships with a local buyer, who provided technical assistance and credit. In other cases, especially within the DSF and SSF clusters, households identified emergencies, household expenses, and strong quality requirements as the main reason for selling to other buyers. The following quotes from households in the DSF and SSF clusters highlight these points:

- ‘Low production and lack of money affect our ability to send our children to classes in the first months of the year’.
- ‘Our production was low. Had we delivered the production to Soppexcca, we would not have received any income because of our existing debt with Soppexcca’.
- ‘The final payment is very late, and we need to pay coffee pickers; also, it has happened that our coffee has been too humid to pass inspection by Soppexcca’.

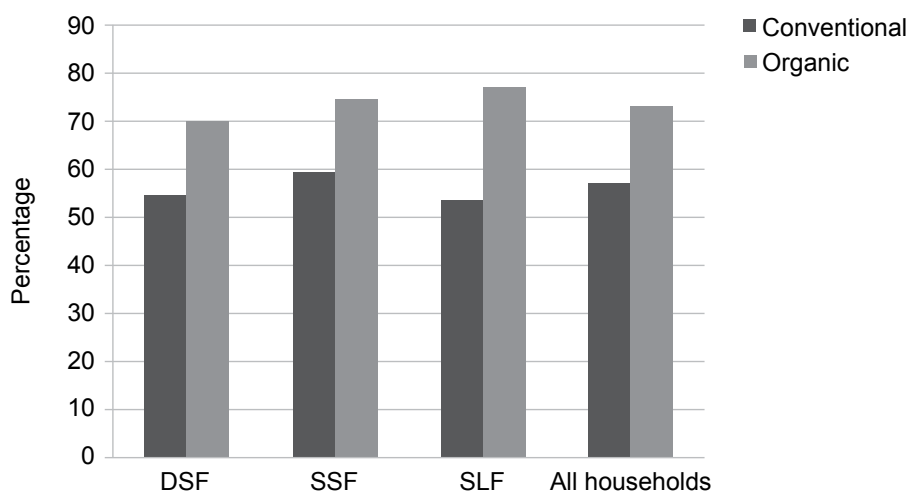


Figure 3 Percentage of coffee sold to Soppexcca, by producer type and cluster (2-year average, 2008 to 2009)

- 'Mr Gutierrez pays better than Soppexcca; Soppexcca has too many price deductions, and Mr Gutierrez is less concerned with quality'.

Table 2 presents estimates of the income benefit for Soppexcca members from coffee sales, taking into account sales to Soppexcca and to other buyers and allowing for the differences in farm-gate prices between coffee buyers. Among households from DSF and SSF clusters that produced conventional coffee, the actual income benefits from participation in Soppexcca were small, at \$39/year and \$102/year, respectively. Income benefits would have been more than twice the actual benefits if households had sold all of their production to Soppexcca. Organically certified households from the DSF and SSF clusters experienced higher income benefits than their conventional counterparts, at \$102/year and \$163/year, respectively. However, these households also struggled to maximize their income benefits from participation in formal markets. On average, organically certified households captured only 42 per cent of the total possible income benefits due to selling coffee to other buyers.

Conclusions

Buyers in the coffee chain played a vital role during the initial stages of Soppexcca's development, and continued to play an important role in Soppexcca's operations during the assessment period (e.g. through the provision of pre-financing and willingness to negotiate prices above Fairtrade floor price). The sourcing of high-quality coffee motivated their investments and interactions with Soppexcca. Following the coffee crisis, NGOs stepped in to build local capacities for the

Table 2 Estimated annual income benefit from Fairtrade coffee sales (2-year average, 2008 to 2009)

<i>Cluster</i>	<i>Average total coffee production (45 kg sack green coffee)</i>	<i>Potential income if all coffee sold to Soppexcca¹</i>	<i>Potential income benefit if all coffee sold to Soppexcca²</i>	<i>Actual income, taking into account sales to other buyers</i>	<i>Actual income benefit from sales to Soppexcca</i>	<i>% of potential income benefit captured</i>
<i>Conventional</i>						
DSF	5.9	643	71	611	39	55
SSF	18.0	1,962	216	1,875	129	60
SLF	100.2	10,922	1,202	10,363	643	54
<i>Total</i>	<i>31.3</i>	<i>3,412</i>	<i>376</i>	<i>3,251</i>	<i>215</i>	<i>57</i>
<i>Organic</i>						
DSF	6.6	898	257	821	102	39
SSF	9.5	1,292	371	1,198	163	44
SLF	49.4	6,718	1,927	6,275	890	46
<i>Total</i>	<i>14.0</i>	<i>1,904</i>	<i>546</i>	<i>1,758</i>	<i>232</i>	<i>42</i>

1 The following two-year average farm-gate prices (2008 to 2009) were offered by Soppexcca: \$136/45-kg sack for organic coffee and \$109/45-kg sack for conventional coffee.

2 Difference in income generated from all coffee production being sold to Soppexcca versus income generated from all coffee being sold to other buyers. A farm-gate price of \$97/45-kg sack was used for estimating income from sales to other buyers. This price is 75% of the 2-year average (2008 to 2009) of the average New York 'C' contract price between December and March – the period during which farmers in Nicaragua sell their coffee.

production, processing, and marketing of high-quality coffee. Soppexcca's strong professional management – a lasting outcome of previous buyer interventions – made it a useful partner for NGOs looking to advance poverty reduction and environmental goals. Soppexcca is not alone in having received considerable NGO support: the literature highlights the high level of support given to some cooperatives in Latin America that participate in certified markets: for example, El Ceibo in Bolivia (Bebbington et al., 1996) and Forestcom in Guatemala (Nittler and Tschinkel, 2005).

Despite major gains during the assessment period, however, Soppexcca remained highly vulnerable to challenges in the local environment and to internal and external shocks. The vulnerability derived, in part, from Soppexcca's limited success in capturing more of its members' production, increasing its members' coffee productivity, and building stronger membership participation in cooperative governance. Soppexcca's coffee buyers made clear their concerns over Soppexcca's vulnerability to a change in management. However, both buyers and NGOs were reluctant to seek out dialogue with Soppexcca and its network of business and NGO supporters to address the complex problems faced for future growth and development. One could also imagine the reluctance of any one buyer or NGO to challenge Soppexcca (e.g. to decentralize decision-making or improve the performance of services), as

buyers and NGOs also depended heavily on Soppexcca for providing high-quality coffee and the implementation of programmes that were expected to contribute to development goals.

Results at the household level showed that Soppexcca, with NGO and buyer support, provided important services to its members which otherwise would not have been available. Evidence suggests that Soppexcca's technical assistance and credit programmes played an important role in households' ability to improve the quality of their coffee production, expand their area under coffee production (and rejuvenate existing areas), and reduce their vulnerability to asset erosion and food insecurity (e.g. through higher prices and access to credit). However, many households struggled to intensify coffee management and benefit from the higher prices offered by Soppexcca. In some cases, annual credit was used to meet household consumption needs, rather than to intensify coffee production. In other cases, the institutional context was highly unfavourable to coffee intensification (e.g. the lack of livelihood security and weak community organization). The poorest households, which tended to depend heavily on off-farm income, were the least able to benefit from their participation in the value chain. In general, evidence suggests that households faced major trade-offs in investing their scarce assets in coffee production. These findings echo those of other recent studies in Nicaragua (e.g. Wilson, 2010; Beuchelt and Zeller, 2011).

This study highlights some of the complex challenges and dilemmas facing cooperatives in building long-term commercial relations with Fairtrade coffee buyers and advancing goals related to poverty reduction and the environment. With their focus on building a reliable source of high-quality coffee from Nicaragua, buyers showed a willingness and ability to advance cooperative development. However, buyer interactions with Soppexcca were not enough to generate the local capacity development that was needed to build a sustainable supply base. NGOs showed greater interest in building local capacities, but were unwilling to question the design of their interventions or engage Soppexcca in order to build more inclusive governance or more effective services. NGOs and projects operated largely independent of one another, although they often shared similar goals and operated under tight deadlines and stretched budgets. Looking forward, the building of sustainable supplies of high-quality, Fairtrade coffee will require greater coordination and collaboration among chain stakeholders, including buyers, NGOs, researchers, and certification systems, particularly with a view to reaching an adequate level of appropriate investments in individual and organizational capacities. As a starting point, discussions will address the short- and long-term needs and circumstances of cooperatives and their members, as well as the role of different stakeholders in the development process. Building a culture of collaboration will take time and dedication, but doing so may very well be essential for encouraging the innovation, risk-taking, and shared learning needed to build supply capacity in less time and with fewer resources.

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