10. The role of the farmer and their cooperative in supply chain governance: a Latin American small producer perspective

Stephen Pitts[1]

THE LATIN AMERICAN CONTEXT

Two recent reports by the Food and Agriculture Organization (FAO) describe the Latin American context (FAO, 2018; OECD & Food and Agriculture Organization of the United Nations, 2019) and the importance of the agricultural sector for both the economy of the region as a whole and its continued growth and development. The region includes 2 billion hectares of land across 34 countries with a tremendous variety of topography and biodiversity. Latin America is a leading exporter of agricultural products: soybeans, pork, maize, poultry, animal feed, sugar, coffee, and fruits and vegetables. Three major sectors make up the market: a capital and technology-intensive corporate sector; rural subsistence farmers who often suffer from lack of land or market access; and an intermediate sector with market access that remains vulnerable to climate and geopolitical shocks. According to the World Bank, 14 percent of the overall Latin American population is employed in the agricultural sector; this figure is even higher in some specific countries. The region experienced a general poverty reduction of 20 percent from 1990 to 2014, including a 13 percent decrease in rural areas; progress in poverty reduction has not been as robust since then, however. The FAO describes the challenge as developing more inclusive and sustainable agricultural growth against a backdrop of slower demand and lower international prices.

The region's agricultural sector continues to improve technically and structurally. Aided by a combination of government and private research and development, the region has grown 2 percent annually in total factor productivity over the 30 years from 1990 to 2020. This period coincides with the move to trade liberalization and multilateral and bilateral free trade agreements with countries including EU states and the United States. This growth varies by region, farm size, and degree of specialization. It includes technological improvements and production techniques and direct subsidies to farmers. During this period, agricultural production has shifted depending on the country. For example, increased soybean production has been observed in the south, and increased fruit and vegetable production in the north. Cattle ranching and poultry production have both grown as well. An analysis of land structure reveals two different sectors: land concentration in large, export-oriented, capital-intensive farms and land fragmentation in smallholder production, depending on the country. Additionally, there has been increased outside investment in agricultural land.

In addition to production changes, consumption patterns are changing. Throughout the region, population growth is slowing, both because of declining fertility and due to continued outmigration to developed countries, including the United States. Despite this slowdown in population growth, domestic demand for meat, fruits, and vegetables relative to staples like corn, rice, and beans increases as tastes change. The strength of trade linkages, especially to middle-income countries like China and India, has allowed producers with better market access to take advantage of similar demographic changes abroad.

THE IMPORTANCE OF SPECIALTY CROPS

Because of its historical importance in the Fair Trade (FT) and cooperative movements, we examine coffee more closely here. Five Latin American countries (Brazil, Columbia, Honduras, Peru, Mexico) are in the top ten coffee exporters, and Brazil is the largest coffee-producing country globally. Two species of coffee are commonly grown: arabica and robusta. Arabica coffee is often grown at higher altitudes and under a shade canopy by small producers who harvest by hand. Robusta coffee is grown under the direct sun at sea level and harvested by machine. Because of consumer preferences, finished product coffee frequently blends these two types. For this reason, the markets for both types of coffee are closely linked.

Despite some internal shuffling, these countries have maintained their position against coffee producers from Asia. Overall both the value and the quantity of exports have increased from 1990 onward. These increases, however, have not been enjoyed equally by all producers. In the increasingly complex coffee value chain, alliances between growers and roasters have allowed them to capture a larger portion of this value chain as coffee processing has become more concentrated. Moreover, producers have also suffered from price volatility and climate change challenges. A gap is emerging between countries that can successfully process domestic coffee and export a finished product and countries that continue to export green coffee. Thus, increased growth depends on strategies to navigate these challenges. Cooperatives as an organizational strategy can provide solutions to these challenges (Coffee Development Report, 2020).

Aside from coffee, Latin American agriculture also provides many fruits and vegetables for the US market. Production and demand are projected to increase in response to consumer preference changes toward increased consumption of tropical fruits and avocadoes. These areas represent a potential opportunity for poverty alleviation in rural Latin America. Because of this increase, Latin American agricultural trade continues to increase. Since 2016, Mexico has been a net exporter of agricultural products to the United States and provides more products than Canada or the European Union. This stylized fact reflects a broader trend: Latin American agriculture outperforms the same sector in all other world regions. Asia, especially China, has grown as another important export market outside North America.

Through the FAO reports continued project growth in the agricultural sector, this growth is not assured. First, it depends on favorable trade conditions, especially regional free trade agreements with premium demand markets such as the EU and the US. Second, governments must continue to invest in agricultural research, especially to combat climate change, pests, and other environmental factors. Third, poor local infrastructure in roads, ports, and other logistics hampers the ability of farmers to bring their products to market. Fourth, continued growth requires effective institutions such as contract enforcement that attract private investment, insurance, credit, and microfinance services to bolster the household economy of smallholder farmers. Fifth, growth needs a set of coherent policies developed with input from farmers.

Of these challenges, environmental challenges stand out most. Though Latin America enjoys great natural resources—land, forest, and water—climate change, the growth of cities, and unsustainable agricultural practices affect these resources. Thus, the FAO reports recommend that Latin America pursue a path of sustainable agricultural growth that mitigates climate change. Cooperatives can form part of the sustainability strategy to promote growth.

FAIR TRADE MOVEMENT

The FT movement is a well-known attempt to address some of the features of the Latin American reality, including poverty reduction and sustainability. Fair trade emerged as a voluntarily labeling movement in the 1980s between European and US consumers and Latin American producers. Unlike much of anonymous global commerce, it presupposes a relationship between rural agricultural producers and processors based in the developing world. Processing companies agree to pay a minimum price that guarantees fair wages to producers. These producers reinvest some of the profits into the community as part of a "social premium." In recent years, FT has also evolved to include sustainability standards. This movement has gained substantial popularity for smallholder farmers in Latin America and worldwide. In 2018, 350,000 farmers and workers participated in FT projects in the region. The five crops were bananas, coffee, cane sugar, cocoa, and fresh fruit (FairTrade International, 2020).

A recent literature review provides an overview of economics research on the FT movement (Dragusanu et al., 2014). Fair trade standards include six mechanisms: a price floor, an FT premium, stability and access to credit, working conditions, institutional structure, and environmental protection. Fair trade umbrella groups differ as to whether only smallholder producers or large producers can be FT-certified. This difference led to a 2012 split between Transfair USA and Fairtrade International. For our purposes, we focus on smallholder producers. In this context, we note that the institutional structure encourages farmers to organize as a cooperative to make decisions democratically and transparently.

All of the parts of the value chain described in Chapter 9 of this volume must be certified for a product to be considered FT. On the consumer side, the FT label functions as a dimension of consumer taste that differentiates the product and warrants a higher price. Empirical research indicates that consumers trust the FT label and pay more. On the producer side, the evidence for a net benefit is mixed. Producers often receive a higher price for their commodity (Bacon, 2005; Weber, 2011). This result comes as no surprise given the price floor. Moreover, producers often have greater production and higher overall income, as in the case of a group in Oaxaca (Jaffee, 2008).

Two problems prevent this gross benefit from translating into a net benefit for the producer: (1) producers must pay to certify their crop as FT, and (2) they can only recover this cost if they sell a threshold percentage of the crop under the FT label. In extreme cases, producers may "dump" on the market FT-certified coffee that they cannot sell at the FT price. Because of the lost certification cost, they effectively have sold it at a loss.

The problems with FT extend from the producer level to the market level. At the market level, if there is an advantage to selling certified FT coffee over non-FT coffee in a country, producers are expected to switch to producing FT coffee. As the supply of FT coffee increases, the price decreases until FT and non-FT coffee prices equalize. In economic terms, market entry dissipates the rents (de Janvry et al., 2015).

More recent literature addresses two different outcomes for farmers: overall economic stability and environmental practices. In terms of economic stability, Nicaragua coffee farmers who participate in FT cooperatives report less livelihood vulnerability and increased cash flow (Bacon, 2005; Bacon et al., 2008). However, follow-up research with the same population reveals food insecurity, bouts of hunger during the growing season, and no reduction in migration rates (Bacon et al., 2014, 2017). The results in terms of environmental practices give more hope. Both the above Nicaraguan and Oaxacan farmers used a variety of farming practices much more often than comparable farmers not in cooperatives: compost instead of chemical fertilizers, for example, and terraces and barriers to reduce erosion.

This brief survey of the effects of the FT movement on smallholder agricultural producers illustrates some progress in improving their livelihood and the challenges that remain. Fair trade only targets one element of the value chain: like the non-FT producer, the FT producer still grows raw materials at a small scale and sells them in an open market, albeit a slightly more favorable one. The FT and cooperative movements have a history of working together through FT cooperatives. Many FT producers are cooperative members. We argue that cooperative membership offers them the tools to address these remaining challenges of the FT.

HISTORY OF SMALLHOLDER AGRICULTURAL COOPERATIVES

Before examining how cooperative membership addresses the present-day challenges of rural agricultural producers, we examine their evolution over the past hundred years in Latin America. The cooperative story is inseparable from the economic history of Latin America after World War II and of the people of this region—both the European migrants who settled in the countryside as well as their descendants who moved to cities. We focus on smallholder agricultural cooperatives related to economic development after World War II.

Latin American Perspectives uses the image of a tightrope to describe a collection of case studies related to “Latin American Agricultural Cooperatives and Small-Farmer Participation in Global Markets” (Vásquez-León, 2010). The issue’s introduction begins with the context of rural–urban migration and farmland abandonment. It proposes agricultural production cooperatives as a way for smallholders to negotiate better terms of trade and sustain participatory self-governance structures. In contrast with large corporations’ emphasis on continued growth and profits, the authors propose that production cooperatives allow for smallholder producers to pursue stable relationships with their land that are sustainable over the long term. They allow producers to integrate economic capital (assets and land), social capital (the strength of networks and negotiating in groups), and human capital (investment in member education).

Present agricultural cooperatives trace their roots to the cooperative movement, which Europeans brought to Latin America in the early twentieth century. Initially, cooperatives thrived in immigrant communities as they sought to create economic structures apart from the countries in which they lived. After World War II the model expanded to rural areas, where the pooling of resources would improve production for smallholder farmers. Unfortunately, in the subsequent decades of the 1950s and 1960s, both democratic and socialist governments across the region appropriated cooperatives for their own ends, and several scandals tarnished the cooperative’s reputation.

The 1970s allowed cooperatives to return to their original mission as grassroots communities that developed apart from the state with much influence from Catholic liberation theology. In the 1980s, as many Latin American countries adopted neoliberal economic policies, large state-sponsored production collapsed, and agricultural cooperatives emerged to fill in the gaps.

These agricultural cooperatives have continued to walk the tightrope between the promises and the consequences of neoliberalism, where price controls, deregulation, and trade barriers are removed. Within this umbrella falls the solidarity economy—which values the quality of life as much as economic efficiency—as well as the FT movement described above.

In contrast to other movements critical of neoliberalism, which encourage withdrawal from markets and destabilization of governments, agricultural cooperatives seek to reform the markets. Though at times a point of tension, this stance also provides a sense of dynamism and flexibility. The issue provides four case studies. Each shows the opportunities and challenges of organizations in transition: a Japanese–Brazilian pepper cooperative; a nut harvester operated by an indigenous Brazilian group; a Paraguayan organic sugar cooperative exporting FT; and a Paraguayan banana exporter that uses Mercosur. Each cooperative partners with corporations or governments and competes against other producers on the free market. Despite the challenges, Vasquez-Leon and her colleagues conclude that these cooperatives have brought "more democratic forms of participation and social equity" in contrast to the failure of both the state and the private sector to promote a "more equitable and rural society."

Veltmeyer offers an analysis of these two poles (Veltmeyer, 2018). On the one hand, cooperatives and other forms of solidarity economics offer a way to manage rural development within a capitalist system; on the other hand, they offer an alternative to that very same system. Both share the importance of "Buen Vivir," loosely translated as "Good Life," instead of GDP as a guiding quantity.

Like Vasquez-Leon, Veltmeyer begins in the 1980s in response to neoliberalism in Latin America. Vasquez-Leon traced the departure of the poor from rural areas; Veltmeyer details their arrival in the cities, where many worked in the informal sector and earned no better a living than they did in the countryside. Amid this "lost decade" (1980–90) of international development, soup kitchens and social economy projects in slums emerged. Disorganized protests in the 1980s merged into more focused social movements in 1990, in what Veltmeyer calls "the golden age of resistance" that included indigenous groups. These movements funneled a progressivist turn in the late 1990s.

In broad strokes, Veltmeyer situates two different models of cooperatives. One model operates within the second wave of international development, which bears the name "growth with equity," "development from within," or "the new developmentalism," depending on the flavor. Within this framework, cooperatives fill a gap created by the state and private enterprise: a form of community development from the ground up instead of from the top down. He provides examples throughout Latin America of this type of cooperative. The second model operates apart from capitalist societies to create a new model. Veltmeyer provides the example of the Zapatista movement in Chiapas or the Bolivarian Revolution of Venezuela.

The cooperatives we examine fall under the first model. They operate within the market as a means for rural landowners to carve out a space between large corporations and government agencies, pool their various forms of capital, and improve their economic livelihood.

HOW COOPERATIVES ACCOMPANY SMALLHOLDER FARMERS IN THE PRESENT CONTEXT

A recent report from IFPRI highlights the challenges faced by smallholder farmers (Fan et al., 2013). One challenge stems from the lack of integration into markets, both for agricultural inputs and for the sale of agricultural outputs. By themselves, smallholder farmers merely accept market prices, both for the food they consume to survive and for the crops they sell to purchase this food. The welfare effects of market price fluctuations depend on whether the household is a net buyer or seller of the good in question. For example, if the price of corn goes up, the improved price benefits a household that grows corn for its consumption and sells it on the market. However, the same price increase hurts a household that must purchase corn because it cannot produce enough to meet its needs. In addition to global market factors, the uncertainty in the production process has increased as of late because of the impact of climate change—isolated extreme events as well as systemic variation in temperature and rainfall. Moreover, imperfect integration into markets also affects intermediate inputs in the production process, such as fertilizer, credit, and capital. The relative isolation of the rural areas in which smallholder farmers often live makes acquiring these inputs challenging, if they are present at all.

Agricultural cooperatives help these smallholder farmers establish a new relationship with the market in the decommodification that has affected coffee and other value chains since the early 2000s (Fitter & Kaplinksy, 2001). Historically, coffee has been traded as a commodity. The commodity category includes any product whose market contains low barriers to entry, intense competition, and declining terms of trade (Borrella et al., 2015). Moreover, since the breakdown of the International Coffee Agreement in the early 1990s, the price has fluctuated in the world commodity market, with a general downward trend.

However, treating coffee as a commodity fails to recognize the diversity both among and within varieties of coffee. The Coffee Taster's Flavor Wheel distinguishes a similar variety of notes in coffee to those in wine (Coffee Taster's Flavor Wheel, n.d.). At the same time, specialization in final product markets has increased. Consumers are willing to pay a higher price for higher quality coffee from a specific location than for coffee consumed at home and sold in a grocery store. For coffee consumed in a coffee shop, the increased price includes non-tangible elements such as the atmosphere or amenities. Fair Trade and direct trade, which build a direct relationship between the purchaser and the seller, add specialization. Suppose producers can take advantage of this specialization. In that case, growers can exit a large, perfectly competitive market where they sell an undifferentiated commodity and enter a smaller market, which offers them a higher and more stable price and an incentive to improve their production quality.

Producers require accompaniment to transition from one type of market arrangement to another. Borrella et al. (2015) describe the new "connective businesses" category that offers this accompaniment. Fifteen years after Fitter & Kaplinsky above, they confirm the same trends of lower, more volatile prices due to market factors and climate change. All three businesses that they profile fall under the category of direct trade. By changing the governance of the supply chain, coffee producers can improve their connection with consumers. These changes require high costs: roasters are often not used to direct relationships with producers, and producers cannot negotiate with roasters.

"Connective businesses" improve both the aggregate amount of value and its distribution for both parties. They operate as exporters or importers as the situation allows; moreover, they support producers and guarantee the reliability and quality of coffee deliveries. Their support of producers does not stop at incorporating them into the market, for the benefits of markets often do not extend to those at the bottom of the pyramid. Instead, they work with them to create shared value. The business literature distinguishes between two types of constraints faced by those at the bottom of the pyramid: those that limit value capture (transactional constraints) and those that restrict value creation (productivity constraints) (London et al., 2010).

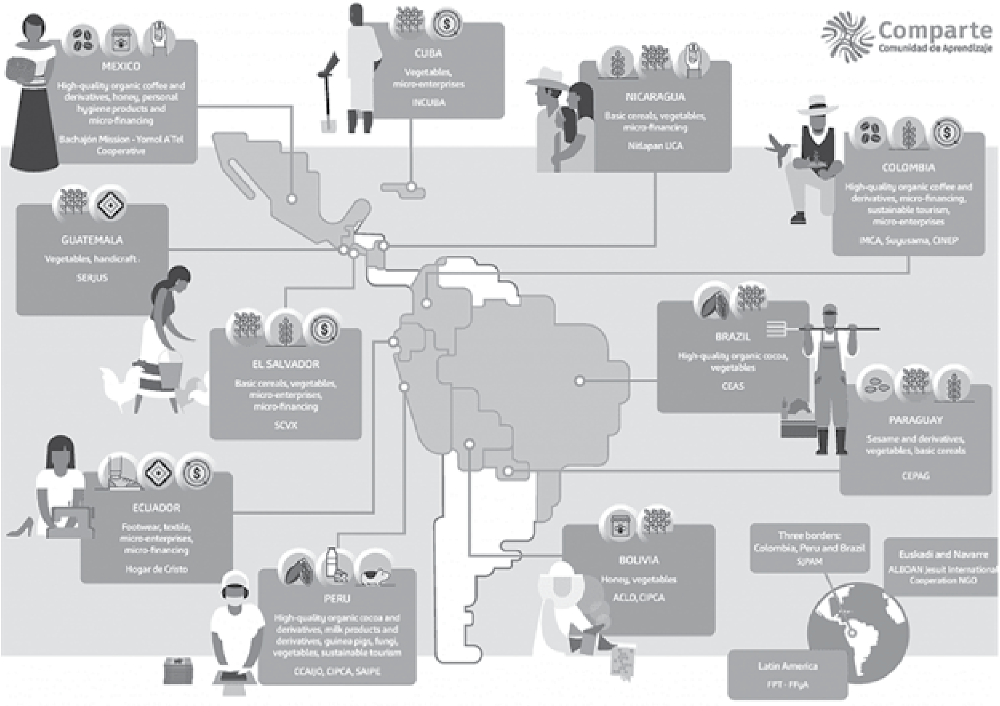
The notion of a "connective business" fleshes out these constraints. It denotes three types of transaction cost constraints: market access constraints, market power constraints, and market security constraints. A coffee cooperative provides market access by transporting perishable coffee cherries to the roasting center and providing coffee producers with information about consumer preferences. It increases market power by allowing producers to negotiate with roasters up the value chain and obtain better terms. Furthermore, it enhances market security by providing producers a guaranteed purchase price on their crops through the growing season, improving the stability of their household economy. In addition, a connective business can relieve productivity constraints by providing agricultural inputs, pre-market credit, and training, all of which improve the yield of the coffee harvest.

The following section provides a case study of a group of faith-based connective businesses in Latin America, focusing on a coffee cooperative in Chiapas, Mexico, that provides a concrete example of how this model works in practice.

THE COMPARTE NETWORK

The Society of Jesus is an international Catholic religious congregation known mainly for its education and social work worldwide. In 2008 a group of social workers in 11 Latin American countries formed an organization called Comparte, "share" in Spanish (Liebsch, 2022; Rivera, 2020). The network members describe themselves as a "community of learning and action formed to construct alternative economic and production initiatives to the prevailing model of development together with producer organizations and other allies." Rooted in a local community, each member organization strives to deepen relationships in the community as it addresses the structural causes of the poverty of the producers. As Figure 10.1 illustrates, Comparte member organizations accompany both rural producers of products such as coffee, chocolate, bananas, honey, corn, and milk and urban producers of textiles, shoes, and other artisanal products. Producers take control of the value chain for their products from the origin. In addition, some Comparte producer organizations also provide microcredit to their members to assist with emergency financial needs or allow them to expand their businesses.

The individual producer organizations of Comparte operate in challenging local contexts with tremendous inequality and resource hoarding. One role of the network is to allow them to share best practices for mutual support and learn from each other. Another part is to connect them with the international network of higher education institutions sponsored by the Jesuits and in the larger Catholic context. Relationships between the academy and the field benefit both parties. On the one hand, higher education institutions provide technical expertise, financial support, and market access to the producer organizations; in turn, the producer organizations provide students and faculty with concrete experience with a model of alternative development and an opportunity to put their skills into practice for social justice.



Source: Comparte Marketing Communications Circular, 2021. Used with permission.

Figure 10.1 *The Comparte network*

Table 10.1 *Comparte members*

County (11)	Social Center (16+3)
Brazil	CEAS Brasil
Bolivia	ACLO Tarija
Bolivia	CIPCA
Colombia	SUYUSAMA
Colombia	IMCA
Colombia	CINEP/Programa por la Paz
Cuba	Centro Loyola Santiago
Ecuador	Viviendas Hogar de Cristo
El Salvador	Solidaridad CVX
Guatemala	SERJUS
Mexico	Misión de Bachajón—YA
Nicaragua	NITLAPAN
Paraguay	CEPAG
Peru	CCAIJO
Peru	CIPCA
Peru	SAIPE
Columbia / Peru / Brazil	Servicio Panamazónico
Latin America	Federación FyA—Formación para el trabajo
Spain (Basque Country)	ALBOAN

AN INTEGRATED VALUE CHAIN IN CHIAPAS

Given the rural agricultural focus of this chapter, we focus on one COMPARTE member in particular: the producer organization Ts'umbalil Sitalá, its associated coffee roaster Bats'il Maya, and the network of coffee shops Capeltic, which for simplicity's sake we will refer to by the umbrella group's name, Yomol A'tel (YA). YA provides a concrete example of how a rural agricultural cooperative can accompany indigenous smallholder farmers in a deeper context than FT to negotiate a different relationship with the market economy. We rely on participatory action research by the director of Capeltic during two of the years (2017–18) in which he was the director-general (Irezabal Vilaclara, 2020).

Irezabal uses "the construction of the price" to describe how YA vertically integrates a value chain from the coffee field to the coffee shop. In contrast to other models that focus only on the economic aspect, YA's approach touches all aspects—economic, cultural, social, and environmental—with a focus on the complete value chain, which includes the coffee itself and the people who produce it. Thus, improving this value chain requires improving the lives of the people who work at all value chain steps.

The first rung of the value chain is the producers themselves. In 2019, there were 361 producers and 10 workers in the producer cooperative Ts'umbalil Sitalá. The main objective of this rung is to improve the agricultural production of these families: providing their food security for their staple crops (corn, rice, and beans), teaching them environmentally sustainable production methods, and offering the ability to sell their cash crop coffee as a finished product and not just as raw material. As members of the same indigenous group as the coffee farmers themselves, the workers accompany the coffee farmers.

The second rung of the value chain is the coffee roastery, Bats'il Maya. It stands at the intersection of the Tseltal way of life and the world coffee market. Its main purpose is to change how the producers interact with the market. On their own, the producers must accept the market price for green coffee. Instead of being price-takers of the volatile commodity price of green coffee, the roastery negotiates on their behalf with customers to obtain a set price for a finished product. To produce a finished product, the roastery built a production facility in the historic center of the indigenous region, even though its remote location increases logistics and transportation costs. The local people think of the production facility as a business and as a center of formation for a "School of Coffee" that serves the coffee producers and their children, many of whom work in the production center.

The third rung of the value chain is the network of coffee shops, Capeltic. It employs 50 workers in Mexico City, Guadalajara, and Puebla, which operate five coffee shops within the respective Jesuit universities in those cities. These coffee shops strengthen the relationship between the coffee field and the academy. They also provide a total value of $40 USD for each cup of coffee instead of the $0.80 that a typical intermediary in the region would pay. In other words, the improved value chain increases (by 50 times) the final value of the producer's product compared to the alternative. This increase holds at scale as well. In 2017, during Irezabal's research, the YA umbrella group earned $1.8 million: the culmination of a decade with average annual production growth of 86 percent.

Even more than the financial benefits of this model, however, Irezabal emphasizes the human benefits. YA provides formation opportunities for parties and all parts of the value chain. Producers are very familiar with the harsh realities of the coffee value chain and the transformative effect of organizations such as YA. The Coffee School that Bats'il Maya offers replicates traditional learn-by-doing educational methods of the Tseltal culture and takes place not in the classroom but in the field, not with outside experts but with members of the same community. Irezabal highlights the same transformative possibilities at the other end of the chain: the 350,000 transactions in Capeltic coffee shops during the 2017 fiscal year provide 350,000 opportunities to invite consumers to a similar transformation. Every person in the value chain—the producer in Chiapas, a coffee shop employee in Guadalajara, an investor in Spain—has a different perspective on this chain and their participation in it increases their solidarity with one another. Instead of investing in a value chain, investors in YA are investing in the economic viability of a region in a way that reduces inequality and generates jobs in one of the poorest regions in Mexico.

Participation in YA helps to develop human capital both within the cooperative and throughout the indigenous community. Within the cooperative, Irezabal describes how a structure of an annual general assembly, monthly executive committee meetings, and regional assemblies for each of the ten regions of the cooperative has helped the organization successfully navigate important decisions during its decade of growth. In the indigenous language, "the word walks" through the community as they solicit feedback and then "the word is collected" when the various administrative groups collect the feedback. As Irezabal points out, this shared decision-making model helps the cooperative avoid the trap of relying on a single decision-maker and being unable to make decisions either when that person is away or when that person moves on. Instead, the shared experience of navigating the challenges of growing a local business has enriched the working relationships among the cooperative members themselves and made them more resilient to withstand future crises.

Similarly, outside the cooperative, its presence in the community offers a different approach to other NGOs and organizations within the region that are primarily supported by the government and aim to improve macroeconomic indicators such as GDP per capita. The agendas for these organizations are often set at the state or federal levels, such as the conditional cash transfer and farm subsidy programs begun by the Mexican government under President Salinas in the 1990s. While these programs help local producers economically, perhaps in the same way as participation in the YA value chain, they do not provide the development of human capital and resilience that YA does. Irezabal defines the term "buen vivir" to describe the integrated way in which a household, and by extension an entire community, holistically makes a living—growing their own food, selling their coffee as a cash crop, participating in their community, and taking care of their surroundings. This broader context is crucial to successfully accompany these producers, not only as economic actors but also as human beings.

GOVERNANCE

The governance of the integrated value chain operates via two committees (Alejandro Rodriguez, personal communication, February 16, 2022). At the origin of the value chain, the board of directors of the producer cooperative Tsumbal'il Sitalá consists of a representative from each of the 11 regions of the cooperative. These representatives are nominated by the annual assembly of that region. It oversees the work of the producers themselves: estimating their harvests, training in environmental practices, and undertaking other regional projects. It also resolves any disputes that occur among the producers. Most importantly, based on the local market and the estimated coffee harvest, it sets the annual price that the cooperative will pay its members for their green coffee. In summary, the board of directors looks inward toward the origin.

In contrast, the Executive Committee of Yomol At'el consists of a representative from each of the projects that YA sponsors: the coffee roastery Bats´il Maya, the coffee shops Capeltic, the producer cooperative Tsumbal'il Sitalá, and the honey cooperative Chabtic. It provides a way for the full-time employees of these organizations—a mix of indigenous and non-indigenous—to look outward, up the value chain, toward the market for finished products. In many cases, the indigenous employees of YA organizations are the sons and daughters of members of the producer cooperatives. The Executive Committee manages the relationships among the subsequent steps of the value chain: the roastery and the Capeltic coffee shops. It also manages the relationships with the university partners and other NGOs that work with the Yomol At'el projects on research projects of common interest that allow for technology transfer between the academy and the field in the style of a Comparte project. This dual governance structure with complementary organisms that look inward and outward up and down the value chain buttresses Yomol At'el as a successful example of vertical integration from the field to the cup and beyond.

SUGGESTIONS FOR FUTURE RESEARCH

This chapter concludes with some suggestions for three broad categories of research needs. First, we need more longitudinal data on communities of producers that include cooperative members and non-cooperative members. Most of the quantitative studies referenced above are based on cross-sectional data. In addition, frequently there is rich data on members but little data on non-members. Little is known about the entry and exit patterns of producers into cooperatives. It would be useful to understand if participation in governance leads to continued use of the cooperative or whether the cooperative is one choice among various brokers and other buyers. This longitudinal data could help answer these questions. In addition, we ought to collect data not only at the producer level but along the entire value chain to examine the impact of vertical integration, as in the case study of Yomol Atel. A recent development review points out this imbalance (de Janvry & Sadoulet, 2020). Development economists have researched the supply side far more than the demand side of agriculture for development.

A second need is to examine these agricultural cooperatives as cooperatives. Qualitative research could determine which of the seven principles of the International Cooperative Alliance are most relevant and ascertain the extent to which members participate fully in the governance process through voting on issues that come before the membership. They could also paint a better picture of the equity needs of cooperatives and how they support their members throughout the marketing year. This research would provide insight into the present channels through which these cooperatives help their members participate more fully in the value chain of various commodities. In addition, it could highlight opportunities for future improvement.

Finally, the focus has been on agricultural cooperatives and those with perennial crops such as coffee. However, other cooperatives exist in Latin America, including forestry cooperatives that are used in community development (Butler and Current, 2021a and 2021b). A useful study would be to compare and contrast agricultural cooperatives with forestry cooperatives to compare governance systems and overall contribution to family income.

CONCLUSION

This chapter has surveyed the present state of rural agriculture in Latin America, in particular the challenges faced by smallholder farmers in the early part of the twenty-first century in the midst of structural changes to the agricultural sector. Using coffee as a representative example, it has told the story of how FT organizations, from the outside, and agricultural cooperatives, from the inside, have attempted to provide a response to these challenges. A case study of a coffee cooperative in Chiapas as one of a network of faith-based cooperatives throughout the region provides a sketch of a different approach that includes both broad-based community development of an entire coffee-producing region and an integrated value chain that stretches from the coffee field to the cup. Only this approach will provide the resilience necessary to address head-on both present and future market challenges.

NOTE

1. The author wishes to thank Michael Boland and two anonymous reviewers for helpful comments and suggestions.

REFERENCES

Alejandro Rodriguez. (2022, February 16). Interview By Stephen Pitts [Telephone].
Bacon, C. (2005). Confronting the Coffee Crisis: Can Fair Trade, Organic, and Specialty Coffees Reduce Small-Scale Farmer Vulnerability in Northern Nicaragua? *World Development*, 33(3), 497–511. https://doi.org/10.1016/j.worlddev.2004.10.002
Bacon, C.M., Méndez, V.E., Gómez, M.E.F., Stuart, D., & Flores, S.R.D. (2008). Are Sustainable Coffee Certifications Enough to Secure Farmer Livelihoods? The Millenium Development Goals and Nicaragua's Fair Trade Cooperatives. *Globalizations*, 5(2), 259–74. https://doi.org/10.1080/14747730802057688
Bacon, C.M., Sundstrom, W.A., Flores Gómez, M.E., Ernesto Méndez, V., Santos, R., Goldoftas, B., & Dougherty, I. (2014). Explaining the 'Hungry Farmer Paradox': Smallholders and Fair Trade Cooperatives Navigate Seasonality and Change in Nicaragua's Corn and Coffee Markets. *Global Environmental Change*, 25, 133–49. https://doi.org/10.1016/j.gloenvcha.2014.02.005
Bacon, C.M., Sundstrom, W.A., Stewart, I.T., & Beezer, D. (2017). Vulnerability to Cumulative Hazards: Coping with the Coffee Leaf Rust Outbreak, Drought, and Food Insecurity in Nicaragua. *World Development*, 93, 136–52. https://doi.org/10.1016/j.worlddev.2016.12.025
Borrella, I., Mataix, C., & Carrasco-Gallego, R. (2015). Smallholder Farmers in the Speciality Coffee Industry: Opportunities, Constraints and the Businesses that Are Making it Possible. *IDS Bulletin*, 46(3), 29–44. https://doi.org/10.1111/1759-5436.12142
Butler, Megan and Current, Dean. (2021a). Evolution of Community-Based Enterprise Governance Over Time: Lessons Learned from the Maya Biosphere Reserve. *Small Scale Forestry*, https://doi.org/10.1007/s11842-021-09486-5
Butler, Megan and Current, Dean. (2021b). A Comparative Analysis of Community-Based Enterprise Governance in the Maya Biosphere Reserve. *Society and Natural Resources*, doi.org/10.1080/08941920.2021.1965272
Coffee Development Report. (2020). International Coffee Organization. www.internationalcoffeecouncil.com/cdr2020
Coffee Taster's Flavor Wheel. (n.d.). Specialty Coffee Association. Retrieved November 23, 2021, from https://sca.coffee/research/coffee-tasters-flavor-wheel

de Janvry, A., McIntosh, C., & Sadoulet, E. (2015). Fair Trade and Free Entry: Can a Disequilibrium Market Serve as a Development Tool? *Review of Economics and Statistics*, 97(3), 567–73. https://doi.org/10.1162/REST_a_00512
de Janvry, A., & Sadoulet, E. (2020). Using agriculture for development: Supply- and demand-side approaches. *World Development*, 133, 105003. https://doi.org/10.1016/j.worlddev.2020.105003
Dragusanu, R., Giovannucci, D., & Nunn, N. (2014). The Economics of Fair Trade. *Journal of Economic Perspectives*, 28(3), 217–36. https://doi.org/10.1257/jep.28.3.217
FairTrade International. (2020). Monitoring the Scope and Benefits of Fairtrade (11th ed.). www.fairtrade.net/library/monitoring-the-scope-and-benefits-of-fairtrade-summary-monitoring-report-11th-edition
Fan, S., Brzeska, J., Keyzer, M., & Halsema, A. (2013). *From Subsistence to Profit: Transforming Smallholder Farms*. International Food Policy Research Institute. https://doi.org/10.2499/9780896295582
FAO. (2018). Panorama de la pobreza rural en América Latina y el Caribe 2018. www.fao.org/3/CA2275ES/ca2275es.pdf
Fitter, R., & Kaplinksy, R. (2001). Who Gains from Product Rents as the Coffee Market Becomes More Differentiated? A Value-chain Analysis. *IDS Bulletin*, 32(3), 69–82. https://doi.org/10.1111/j.1759-5436.2001.mp32003008.x
Irezabal Vilaclara, A. (2020). Gestión y apropiación de alternativas en la cadena de valor del café para la construcción del “buen vivir” en América Latina [Mondragon Unibersitatea]. http://ebiltegia.mondragon.edu/xmlui/handle/20.500.11984/1960
Jaffee, D. (2008). Fair Trade for Indigenous Coffee Producers in Oaxaca, Mexico. In R. Ruben (ed.), *The Impact of Fair Trade* (pp.195–219). Wageningen Academic Publishers. https://doi.org/10.3920/978-90-8686-647-2
Liebsch, MegAnne. (2022, February 8). How One Jesuit Network Supports 50,000 Farmers and Artisans across Latin America. Jesuits.org. www.jesuits.org/stories/this-jesuit-network-supports-50000-farmers-and-artisans-in-latin-america/
London, T., Anupindi, R., & Sheth, S. (2010). Creating Mutual Value: Lessons Learned from Ventures Serving Base of the Pyramid Producers. *Journal of Business Research*, 63(6), 582–94. https://doi.org/10.1016/j.jbusres.2009.04.025
OECD, & Food and Agriculture Organization of the United Nations. (2019). Latin American Agriculture: Prospects and Challenges. In OECD-FAO Agricultural Outlook 2019–2028 (pp.70–124). www.oecd-ilibrary.org/content/component/b2b742eb-en
Rivera, SJ, O.R. (2020, May). La respuesta de la Compañía de Jesús ante la desigualdad y la pobreza en América Latina. *Ibero: Revista de La Universidad Iberoamericana*, 67, 10–13.
Vásquez-León, M. (2010). Introduction: Walking the Tightrope: Latin American Agricultural Cooperatives and Small-Farmer Participation in Global Markets. *Latin American Perspectives*, 37(6), 3–11.
Veltmeyer, H. (2018). The Social Economy in Latin America as Alternative Development. *Canadian Journal of Development Studies/Revue Canadienne d’études Du Développement*, 39(1), 38–54. https://doi.org/10.1080/02255189.2017.1294052
Weber, J.G. (2011). How Much More Do Growers Receive for Fair Trade-Organic Coffee? *Food Policy*, 36(5), 678–85. https://doi.org/10.1016/j.foodpol.2011.05.007