



# Price Crisis Response Initiative

## Summary of Work

December 2019

# Contents

<b>Antitrust Statement</b>	<b>3</b>	<b>Conclusions</b>	<b>42</b>
<b>Executive Summary</b>	<b>4</b>	<b>Appendices</b>	<b>44</b>
<b>Introduction</b>	<b>6</b>	Appendix A: Case Study Summaries	46
<b>Background</b>	<b>8</b>	Appendix B: "No Regrets" Actions	50
Historical Coffee Trade	9	Appendix C: Causal Loop Diagrams	51
Present-Day Market and Current Impacts	10	Appendix D: Strengths and Weaknesses Analysis	55
Potential Future Impacts	12	Appendix E: Systems Map	57
Why Should Specialty Coffee Address This?	12	Appendix E.1: Post-Avance Systems Map Prototype	60
What is the SCA's Role?	13	Appendix E.2: Suggested List of Solutions	61
<b>Our Approach</b>	<b>14</b>	Appendix F: Overview of Relevant Multi-Stakeholder Initiatives	62
Research Process Overview	16	Appendix G: PCR Recommendations	65
<b>Landscape Assessment</b>	<b>20</b>	<b>Bibliography</b>	<b>69</b>
Highlighted Case Studies: Fairtrade and the Partially Liberalized Ghanaian Cocoa Market	21		
Key Learnings Related to the Effectiveness of the Interventions	24		
Assessing Other Sector Collaborations	25		
<b>Key Stakeholder Meetings</b>	<b>26</b>		
New York, US	27		
Berlin, Germany	28		
Campinas, Brazil	30		
Washington, DC, US	32		
<b>Peer Review</b>	<b>35</b>		
Activities	36		
Process and Participation	36		
Benefits	37		
<b>PCR Outcomes: Final Recommendations</b>	<b>38</b>		
<b>Embedding the Work Ahead for the SCA</b>	<b>40</b>		
Workstreams	41		
Key Priorities	41		

# Antitrust Statement

The policy of the Specialty Coffee Association (SCA) is to comply with all federal, state, local, and foreign laws, including antitrust laws. It is expected that all members, member company representatives, and staff involved in SCA activities will be sensitive to the unique antitrust issues raised by this report and, accordingly, will take all steps necessary to comply with applicable antitrust laws.

While the SCA brings significant pro-competitive benefits to industry participants, suppliers, and customers, it is committed to not becoming a vehicle for firms to reach unlawful agreements regarding prices or other aspects of competition or to boycott or exclude firms from the market. This report is prepared in compliance with all antitrust laws and does not propose current or future prices, surcharges, price levels, profit margins, fair or rational prices, pricing methodologies or procedures, or any pricing practices or strategies (including all methods, timing, or implementation of price changes). Members, member company representatives, and staff are to communicate with the SCA if concerned about any potential breach of antitrust laws in relation to this report or any convening.

# Executive Summary

In August of 2018, the commodity futures price of coffee dropped below US\$1.00<sup>1</sup> per pound—a price well below the cost of sustainable production for the majority of coffee farmers—for the first time in 12 years. The price drop received widespread attention as the price of coffee was so low that not only were coffee farms unprofitable, but many coffee producing communities were in a state of humanitarian crisis where basic survival needs were at risk. For countries that are heavily dependent on coffee exports, the effects of low prices can be especially pernicious and far-reaching: rural out-migration, transition to illicit crops, and increased food insecurity have all been linked to low coffee prices.

As farmers struggle to break even, they reduce or forgo vital but costly farm maintenance activities, resulting in diminished quality and yields, and some farmers transition out of coffee altogether. If the current scenario of low and volatile prices continues, the volume, quality, and diversity of the global coffee supply will be severely diminished.

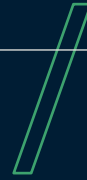
<sup>1</sup> All prices referenced in this document are listed in US dollars.

These untenable commodity prices are juxtaposed against a roaster and retailer sector that is thriving. In 2015, the estimated revenue of the retail coffee market was \$200 billion, with the largest roasters achieving operating profits upwards of 15%. Encouraged by optimistic growth projections, the largest companies have leveraged their extraordinary profits to purchase competitors and flagship premium brands, resulting in an increasingly consolidated roaster/retailer landscape in which the top 10 roasters now supply 35% of the world's coffee. This consolidation has put downward pressure on traders and producers—traders report terms of payment up to 300 days and some roasters have completely pulled out of high-cost countries of origin. If left unaddressed, the increasing consolidation of roasters will continue, resulting in mounting pressure, and eventually, further consolidation of traders and producers.

The Specialty Coffee Association (SCA) commissioned the Price Crisis Response (PCR) Initiative in December 2018. Led by a core team of SCA staff with the support and guidance of Forum for the Future and industry volunteers, the mission of the year-long endeavor was to confront the economic systems that threaten the livelihoods of coffee farmers and the quantity and quality of the global coffee supply. At the outset, the PCR team recognized that although this current price drop has been immensely harmful for coffee producing communities, it is a short-term symptom of a coffee market that hasn't been sustainable for most coffee farmers for a long time. For that reason, the team allocated substantial time and resources to understanding the structure of coffee trade and the root causes of the current crisis in order to better position themselves to identify interventions with the most potential for long-term, systemic change, rather than a short-term fix.

Engaging with hundreds of stakeholders through strategic meetings, webinars, and a peer review process, it became clear that focusing the distribution of value between actors along the value chain was critical to addressing the cyclical nature of the commodity futures market, the extractive nature of the current coffee system, and the ensuing devastation in coffee communities. Evidence from a landscape analysis that examined previous interventions to improve returns to producers of historically extractive commodities corroborated the decision to focus on value distribution. The landscape analysis revealed that equitable value distribution as a strategy has yet to be pursued, and other interventions—most focused on improving production in some way—have achieved limited success. Most notably, post-profit investment in sustainability projects has not been successful in improving the long-term sustainability of coffee farmers, nor has it deterred the concentration of wealth and power that squeezes coffee farmers and their businesses. In light of this evidence, and in concert with stakeholders, the PCR team concluded that envisioning a new way forward for the specialty coffee sector would require identifying economic models that distribute value more equitably and recognize the principle of taking less, rather than giving more, as a core value.

Structured to reflect our own journey through this work, this report synthesizes the desk research, stakeholder interviews, four industry convenings, and learnings from our peer review process into a series of recommendations. The recommendations put forth by this report have been selected for their strong potential to foment long-term change in the coffee sector. The PCR team recognizes that implementing these recommendations will require overcoming numerous challenges, including skepticism from parties currently benefiting from the status quo. Ultimately, these are some of the best options for achieving a specialty coffee sector that distributes value equitably, fosters resilient coffee farming communities that are economically prosperous, and values diverse producers of differentiated coffees.



# Introduction

In December 2018, the SCA commissioned the Coffee Price Crisis Response (PCR) Initiative aimed at understanding and addressing the price crisis affecting coffee farmers and threatening the supply chain.

Over 12 months, a team comprised of SCA staff, board members, and industry volunteers has convened meetings, hosted workshops, researched interventions, and shared its journey with the industry in accordance with the vision, purpose, and commitments below:

**Vision:** A specialty coffee sector that distributes value equitably, fosters resilient coffee farming communities that are economically prosperous, and values diverse producers of differentiated coffees.

**Purpose:** The PCR Initiative exists to confront low commodity futures prices and price volatility threatening the specialty coffee industry, and to support the development and utilization of alternative economic models for specialty coffee.

**Problem Statement:** Consistent pricing volatility and commodity futures prices at record low levels, combined with embedded systems that work together to deter actors from pursuing a more equitable distribution of value along the value chain, contribute to unsustainable livelihoods for coffee farming communities and the vulnerability of the specialty sector.

## Objectives of the Initiative

**Take Action:** Identify and implement immediate, mid-term, and long-term actions for the SCA to address the price crisis that are “fit for purpose,” or appropriate for the SCA to undertake.

**Make a Long-Term Difference:** Establish infrastructure to enable long-term embedding of this work into the SCA’s “ways of being” so the SCA is fulfilling its fundamental mission into the future; this crisis has been going on for decades and will not be solved with a quick-fix project.

**Industry Uptake:** Stakeholder engagement to ensure maximum influence and uptake of the SCA’s work. This will move beyond communications to think through how to drive behavior change in the sector.

**Team:** Envisioned jointly by members of the SCA’s Board of Directors and staff, the PCR was designed around a core team of staff who would devote a substantial amount of their professional bandwidth, if not the majority, to the initiative, including:

- ▶ Ric Rhinehart, SCA Executive Director Emeritus
- ▶ Kim Elena Ionescu, SCA Chief Sustainability and Knowledge Development Officer
- ▶ Ellie Hudson, Price Crisis Response Project Director
- ▶ Julie Housh, Price Crisis Response Project Manager

Colleen Anunu volunteered to support the core team both as a board member, and due to its overlap with her work, as Director of Coffee Supply Chain at Fair Trade USA. Soon after the initiative’s inception, she was joined by Vera Espíndola Rafael, a newly elected member of the SCA Board undertaking research on the growth of domestic coffee markets in coffee-producing countries that complemented the PCR’s purpose, as well as Niels Haak, Senior Manager of Sustainable Coffee at Conservation International, whose participation facilitates alignment between the SCA and the Sustainable Coffee Challenge led by Conservation International.

The SCA also secured a third party, Forum for the Future (Forum), a sustainability non-profit focused on systemic solutions to sustainability challenges, to support the PCR Initiative by facilitating the year-long research and exploration that led to the creation of this report. Samantha Veide, Associate Director, led the project on behalf of Forum, with ongoing assistance from Roberta Iley, Principal Change Designer, and support from Rodrigo Bautista, Principal Change Designer, on the systems map and Sumi Dhanarajan, Associate Director, on research conducted into possible interventions.

# Background

A review of coffee's trading history as well as the present-day market, its impact, and its potential future impacts. We also ask: Why should specialty coffee address this? What role can the SCA play in addressing the crisis?





## Historical Coffee Trade

While it is estimated that human consumption of coffee began as early as AD 1000, the first cultivation and trading of coffee at any sort of scale did not begin until the 1400s. Yemeni merchants helped popularize the beverage throughout the Muslim world, then being grown by small-scale farmers; only a small amount of this coffee made it to Europe for consumption. Government-backed merchants like the British and Dutch East India Companies began trading coffee in the mid-1600s, shaping the models of coffee production and consumption that persist in today's markets. By the end of the seventeenth century, large-scale cultivation had begun when the Dutch introduced coffee to the East Indies and, largely because of their use of forced labor, they quickly began to dominate the market.<sup>2</sup> Other colonial powers, particularly France, followed suit, using slaves in their colonies to grow coffee for the export market.<sup>3</sup> By the end of the eighteenth century, coffee was second only to sugar in terms of the quantity of slaves used for production<sup>4</sup>. This particular market structure—the Global North<sup>5</sup> exerting power over the trade of coffee that is produced in the Global South by artificially low-cost labor—is still reflected in the present-day market.<sup>6</sup>

Producing countries Brazil and Vietnam came to challenge this power structure, not in terms of ownership of the trade or the use of low-cost labor, but through enormous production volumes and subsequent influence on global price. By 1850, Brazil was producing half of the world's coffee, and thanks to a bumper crop, in 1906 it produced almost five times the volume of the rest of the world combined.<sup>7</sup> Brazilian production volume, coupled with an increase in coffee production in other Latin American countries during that time, led to low coffee prices and set an important precedent for the region's influence on supply, and specifically with Brazilian production, on the price of coffee.<sup>8</sup>

Though introduced by French missionaries in 1857, coffee wasn't produced in Vietnam at a globally significant amount until the end of the twentieth century after the quota system was eliminated from the International Coffee Agreement (ICA)<sup>9</sup> in 1989. It was then that coffee production began to skyrocket, largely due to incentives provided by the (independent) Vietnamese government.<sup>10</sup> During the final decade of the twentieth century, Vietnam went from producing fewer than two million bags a year to over twenty-five million bags a year, making it the second largest producer of coffee after Brazil.<sup>11</sup>

It would be impossible to talk about today's price crisis, even with an exclusive focus on specialty coffee, without talking about the commodity futures market (the "C market") and the Intercontinental Exchange (ICE). In 1882, the first coffee exchange was founded in New York City following a period of oversupply. Strong production in Brazil and increased planting in South America during the 1870s overwhelmed the market, and the dominant buyers at the time, who were organized in a syndicate, collapsed and dumped their stocks in 1880.<sup>12</sup> Out of the ensuing stagnation rose the New York Coffee Exchange ("the Exchange"), modeled on the successful Cotton Exchange and Chicago Board of Trade which sought to establish a consistent and well-regulated market. The Exchange created standards for coffee grades, established an arbitration procedure to deal with disputes (none existed previously), and allowed buyers and sellers to hedge the risks associated with market volatility by enabling prices to be fixed in the present for coffee to be delivered at a future date. Since 1882, the Exchange has evolved to offer more sophisticated risk management tools—options, for example, were introduced in 1986— and those tools, as well as the attractiveness of

---

<sup>2</sup> Nina Luttinger and Gregory Dicum, *The Coffee Book: Anatomy of an Industry from Crop to the Last Drop* (New Press, The, 2011).

<sup>3</sup> Steven Topik, "The Making of a Global Commodity: Part 1: Out of Arabia," *Specialty Coffee Association News*, October 4, 2013. <https://scanews.coffee/2013/10/04/the-making-of-a-global-commodity-out-of-arabia/>.

<sup>4</sup> Benoit Daviron and Stefano Ponte, *The Coffee Paradox: Global Markets, Commodity Trade and the Elusive Promise of Development* (Zed books, 2005).

<sup>5</sup> The terms "Global North" and "Global South" refer to a theoretical geographic divide ("the Brandt Line") between more developed countries (generally located above the Brant Line) and countries with a lower gross domestic product (per capita), which are generally located below the Brant Line. The Royal Geographical Society has put together a one-page explainer on this topic here: <https://www.rgs.org/CMSPages/GetFile.aspx?nodeguid=9c1ce781-9117-4741-af0a-a6a8b75f32b4&lang=en-GB>.

<sup>6</sup> Janina Grabs and Stefano Ponte in their 2019 paper, "The evolution of power in the global coffee value chain and production network" note that there is disagreement on the definition of the term "power" in the broader political science and political economy academic literature. To address this lack of consensus, they define several types of power, and provide evidence that the coffee industry is a "buyer-driven" (as opposed to producer-driven) supply chain which is characterized by buyers of coffee exhibiting coercive power, or the ability to leverage unequal bargaining relationships.

<sup>7</sup> Steven Topik, "The Making of a Global Commodity: Part 2: Coffee Comes to the Americas," *Specialty Coffee Association News*, September 21, 2013.

<sup>8</sup> Benoit Daviron and Stefano Ponte, *The Coffee Paradox: Global Markets, Commodity Trade and the Elusive Promise of Development* (Zed books, 2005).

<sup>9</sup> International Coffee Organization, "Frequently Asked Questions: What is the International Coffee Agreement?" Accessed February 4, 2020. [http://www.ico.org/show\\_faq.asp?show=4](http://www.ico.org/show_faq.asp?show=4)

<sup>10</sup> International Coffee Organization, "Country Coffee Profile Vietnam" ICC 124–9, March (2019).

<sup>11</sup> International Coffee Organization, "Country Coffee Profile Vietnam" ICC 124–9, March (2019).

<sup>12</sup> E. M. Brunn, "The New York Coffee and Sugar Exchange," *The Annals of the American Academy of Political and Social Science* 155, no. 1 (1931): 110–18.

commodity investments in relation to other investments, have dramatically increased the number of transactions on the C market in recent years.<sup>13</sup>

While the Exchange does not grade coffee for the specialty market (nor has it ever done so), the price on the exchange is frequently used as a reference price for specialty coffee contracts. A price premium, or differential, gets added to that base price to reflect additional value ascribed to taste attributes, provenance, or certification(s) the coffee carries. This is important for a number of reasons: first, because while differentials may increase and decrease from year to year depending on the level of the C market in order to provide a cushion from volatility, they do not respond to daily market fluctuation; and second, because most producers sell coffee at a variety of different quality levels (including some specialty and differentiated products and some undifferentiated products), they therefore have a relationship to the C market even if their specialty buyers do not. Likewise, though Vietnam produces almost exclusively *Coffea canephora* (Robusta coffee), which is traded on a different platform from the Arabica futures market, the two coffee types are often blended in coffee products purchased by consumers, which makes the production volumes and futures-market price of Robusta relevant to the price crisis facing Arabica producers.

There are many more nuances to the history of coffee trade: each producing and consuming country has a unique coffee history that cannot be neatly packaged into a single story. Although the coffee trade has been transformed in numerous ways since the end of the colonial era, colonialism, the rise of and domination of producing nations Brazil and Vietnam, and the creation of the C market have all had long-lasting impacts on the structure and dynamics of the current value chain.

## Present-Day Market and Current Impacts

Coffee production continues to be concentrated in the Global South. Many producing countries rank low in economic and social development metrics, with 18 out of 44 exporting members of the International Coffee Organization (ICO) falling in the category of Least Developed Countries.<sup>14</sup> For this group of countries, coffee remains an important agricultural commodity in terms of its contribution to rural employment, GDP, and export earnings.<sup>15</sup> If the present situation remains unchanged, the sector will be unable to make its contribution to meeting the United Nation's Sustainable Development Goals and may instead push progress backwards. The most acute symptom of low prices is the inability of

many farmers to make a profit growing coffee. A 2017 literature review on coffee farm profitability conducted by the SCA found a price threshold for farm profitability of \$2.50/kg, or approximately \$1.14/lb.<sup>16</sup> Given the C market price has oscillated between \$0.95 and \$1.05/lb. for much of 2019 this indicates that many farmers, the majority of whom are smallholders in countries with little to no social safety nets, are operating at a loss.<sup>17</sup> A recent ICO survey of coffee growers reported that the income of the respondents had decreased by an average of 10% in 2018, the year that the C market price dipped below \$1/lb.<sup>18</sup> The impacts of low prices affect each producing country differently. Low-productivity/high-cost countries are the most severely affected: preliminary results from a survey of coffee farmers conducted for the 2015/2016 production season found that 53% of Colombian farmers were operating at a loss, and although growers in Costa Rica and Honduras fared better, more than 25% of farmers in both countries operated at a loss.<sup>19</sup>

Exacerbating these low prices is price volatility. Like many agricultural commodities, green coffee prices are characterized by volatile boom and bust cycles. Weather shocks, such as frost and droughts, and bumper crops in Brazil and Vietnam can result in huge shifts in global supply, and subsequently, price. These price fluctuations are further amplified by the inelastic supply of coffee, a result of the long lag between planting and harvesting combined with the 20–30-year investment horizon. Recent market prices have hit historic lows in large part because of the surplus volumes of coffee being produced by Brazil and Vietnam.<sup>20</sup>

Price volatility results in risk for all actors in the supply chain, but those that are least equipped to mitigate these risks are

---

<sup>13</sup> "Intercontinental Exchange (ICE) Coffee C Market Information," *ICE Futures U.S.*, 2019, [https://www.theice.com/publicdocs/ICE\\_Coffee\\_Brochure.pdf](https://www.theice.com/publicdocs/ICE_Coffee_Brochure.pdf).

<sup>14</sup> International Coffee Organization, "Development of Coffee Trade Flows" ICC 121–4, March (2018).

<sup>15</sup> International Coffee Organization, "Background Paper: Achieving the Sustainable Development Goals in the Coffee Sector" ED 2303/19, May (2019).

<sup>16</sup> Specialty Coffee Association (2017) "Coffee Production Costs and Farm Profitability: Strategic Literature Review".

<sup>17</sup> "2019 Coffee Historical Prices / Charts (ICE Futures)," 2019.

<sup>18</sup> International Coffee Organization, "Survey on the Impact of Low Coffee Prices on Exporting Countries" CCC 124–4, March (2019).

<sup>19</sup> International Coffee Council, "Profitability of Coffee Farming in Selected Latin American Countries—Interim Report" ICC 124–6, May (2019).

<sup>20</sup> International Coffee Organization, "Background Paper: Achieving the Sustainable Development Goals in the Coffee Sector" ED 2303/19, May (2019).

the farmers, especially smallholder farmers, which account for approximately 80% of all coffee farms.<sup>21</sup> Women are especially exposed to the negative effects of low prices and price volatility as their ability to supplement their income is more likely to be compromised by their often unequal access to resources and land titles.<sup>22</sup> Additionally, there is evidence that suggests low and volatile coffee prices are correlated with increased child labor<sup>23</sup> and food insecurity among coffee producing households.<sup>24</sup> The current issues in the coffee sector have been linked to migration, particularly from Central America to the US, although the magnitude of effect has yet to be quantified. The consequences of low coffee prices for producing countries include the pauperization of rural communities, social unrest, domestic and international migration, abandonment of coffee growing, or even transition to farming illicit crops.<sup>25</sup>

The rise of the specialty coffee market, which has created a demand for differentiation by characteristics such as variety, flavor profile, and sustainable growing practices, has often been considered a pathway to profitability for farmers. But for many farmers, accessing these differentiated markets requires additional inputs and labor relative to the production of commodity-grade coffee, which results in increased costs of production. While these types of coffees may be sold for a premium, thus earning the designation of "specialty," many specialty coffee pricing schemes still use the commodity futures-market price as a reference—for example, the C market price plus \$1.50/lb.<sup>26</sup> This means that while those farmers might get paid more for that coffee, their price will not necessarily cover their cost of production and will be subject to the same volatility as commodity coffee.

In most producing countries, coffee is primarily an export commodity with more than 70% of production being shipped to international markets.<sup>27</sup> Given that the vast majority of coffee is exported in green form, this means that much of the value addition is captured by roasters and retailers in importing countries.<sup>28</sup> Currently, it is estimated that the average green coffee export value is less than 10% of the \$200 billion revenues generated in the coffee retail market.<sup>29</sup> Though coffee prices have been volatile throughout the history of the coffee trade, the amount of value farmers receive relative to the total value created by the market has been decreasing. A report on the French at-home coffee market found that while roasters and distributors increased their revenues by 212% between 1994 and 2017, coffee farmers' revenue increased by less than

30% in the same period, while their share of the total value decreased from 22% to less than 15%.<sup>30</sup> Another study reported that between 1980 and 2005, the value farmers received of the retail price in the US on average for Arabica coffee reduced from 34% to 21%.<sup>31</sup>

All of these factors together—the structure of the coffee trade, the use of the C market price as a price reference, the price volatility of that market, increasing costs of production, and the majority of market-recognized value addition happening outside exporting countries—not only help us understand why the current price crisis exists, but also provides a foundation for employing systems change thinking (for more detail, refer to "Our Approach" on page 14).

---

<sup>21</sup> David Browning, *Using Technology to Help Smallholder Farmers*, Re:co Symposium, August 12, 2019, video, 6:56, <https://www.youtube.com/watch?v=OXY9R1MqT9Y>.

<sup>22</sup> Terri Raney et al., "The Role of Women in Agriculture," 2011.

<sup>23</sup> Ulrik Beck, Saurabh Singhal, and Finn Tarp, "Coffee Price Volatility and Intra-Household Labour Supply," No. UNU-WIDER Research Paper Wp2016-0016, 2016.

<sup>24</sup> Martha Caswell, V. Ernesto Méndez, and Christopher M. Bacon, "Food Security and Smallholder Coffee Production: Current Issues and Future Directions," 2012.

<sup>25</sup> International Coffee Organization, "Background Paper: Achieving the Sustainable Development Goals in the Coffee Sector," May (2019).

<sup>26</sup> International Coffee Organization (ICO), "Relationship between Coffee Prices in Physical and Futures Markets," *International Coffee Organization, London*, 2011, <http://www.ico.org/documents/icc-107-4e-prices-markets.pdf>.

<sup>27</sup> International Coffee Organization, "Development of Coffee Trade Flows" ICC 121-4, March (2018).

<sup>28</sup> International Coffee Organization, "Background Paper: Achieving the Sustainable Development Goals in the Coffee Sector," ED 2303/19, May (2019).

<sup>29</sup> Panhuysen, S. and Pierrot, J. (2018). *Coffee Barometer 2018*.

<sup>30</sup> Basic, "Coffee: The Hidden Crisis Behind the Success Story," 2019, [www.lebasic.com/en](http://www.lebasic.com/en).

<sup>31</sup> Christopher L. Gilbert, "Value Chain Analysis and Market Power in Commodity Processing with Application to the Cocoa and Coffee Sectors," *Commodity Market Review*, 2008.

## Potential Future Impacts

With the inability to make a profit, farmers may transition to more viable agricultural alternatives or may leave coffee, while the production levels of others will suffer due to lack of investment. Some of these effects have already manifested. Today, just five countries produce over 70% of the world's coffee.<sup>32</sup> As fewer smallholder farmers are able to make a livelihood growing coffee, production will continue to shift to large-scale farming operations, many of which are located in these five countries. Not only will this limit the availability of particular flavor characteristics, it makes the coffee supply, and price, increasingly vulnerable to climatic and geopolitical events.<sup>33</sup> The Columbia Center on Sustainable Development's recent report on the economic viability of coffee production found that under a business-as-usual scenario, this consolidation of coffee production is likely to continue.<sup>34</sup> They also found that if Brazil continues to increase production efficiency, production in the rest of the world will contract, reducing the supply of coffee from different origins. Both of these feasible scenarios threaten the diversity of origins that brands rely on.<sup>35</sup> As the combination of high production costs and low prices continues to consolidate production in fewer countries, the availability of differentiated green product could be dramatically reduced. For those farmers that continue to produce coffee, low and volatile prices will reduce their ability and desire to invest in modernization and purchase inputs, both of which are imperative to achieving maximum quality and yields, especially as climate change increases pest pressures and extreme weather events.<sup>36</sup>

While coffee prices are currently low due to an oversupply in the market (as one factor), the global demand for coffee is increasing rapidly and is predicted to outpace supply in the near future. Global demand grew 2% in the period between 2012 and 2017, largely driven by non-traditional markets and producing countries.<sup>37</sup> According to the 2018 Coffee Barometer, "if this pace of growth continues, the coffee sector will need 300 million bags of coffee by 2050, which means doubling or even tripling the current annual world production."<sup>38</sup> Doubling current production will be difficult in a business-as-usual scenario given the increasingly limited amount of land suitable for coffee production as a result of climate change: by 2050, suitable land for producing Arabica and Robusta coffee will decrease by 75% and 63%, respectively.<sup>39</sup>

## Why Should Specialty Coffee Address This?

Current and future impacts of the coffee price crisis threaten not only the sustainability of the coffee industry as a whole, but the livelihoods of millions of coffee-growing families and the viability of the companies who depend on a reliable green coffee supply. Specialty coffee, which tends to be produced on a smaller, higher production price-per-pound scale, is particularly vulnerable. These vulnerabilities, along with other qualities of the specialty sector, not least of which include the SCA's espoused values, create both the obligation to address this crisis as well as the opportunity to make lasting transformational change.

In the words of SCA Executive Director Emeritus and co-creator of the PCR Initiative Ric Rhinehart:

Specialty coffee—defined as coffee and coffee products that garner a premium to commodity coffee in the same markets—faces economic viability challenges because competition for customer share has resulted in polarization: on the one hand, high value products and on the other, mass market products. That polarization has, in turn, stimulated enormous investments in refined marketing positions as a strategy for high value and efficiency in production for mass market products, and the gap between the two is widening.

In other words, while many specialty brands are highly invested in marketing their product as differentiated from commodity product, this ability to offer a differentiated product could be under threat.

---

<sup>32</sup> International Coffee Organization, "Background Paper: Achieving the Sustainable Development Goals in the Coffee Sector," May (2019).

<sup>33</sup> International Coffee Organization, "Background Paper: Achieving the Sustainable Development Goals in the Coffee Sector," May (2019).

<sup>34</sup> Jeffrey Sachs, Kaitlin Y. Cordes, James Rising, Perrine Toledano, and Nicolas Maennling, "Ensuring Economic Viability and Sustainability of Coffee Production," Columbia Center on Sustainable Investment (October 2019).

<sup>35</sup> Jeffrey Sachs, Kaitlin Y. Cordes, James Rising, Perrine Toledano, and Nicolas Maennling, "Ensuring Economic Viability and Sustainability of Coffee Production," Columbia Center on Sustainable Investment (October 2019).

<sup>36</sup> International Coffee Organization, "Background Paper: Achieving the Sustainable Development Goals in the Coffee Sector," May (2019).

<sup>37</sup> Panhuysen, S. and Pierrot, J. (2018). Coffee Barometer 2018.

<sup>38</sup> Panhuysen, S. and Pierrot, J. (2018). Coffee Barometer 2018.

<sup>39</sup> Jeffrey Sachs, Kaitlin Y. Cordes, James Rising, Perrine Toledano, and Nicolas Maennling, "Ensuring Economic Viability and Sustainability of Coffee Production," Columbia Center on Sustainable Investment (October 2019).

This concentration of production is also problematic from an infrastructure standpoint. In many places, the export of specialty coffee relies on the infrastructure—the mills, transportation, marketplaces, etc.—that was purpose-built (and still primarily exists) to export large volumes of coffee. If the volume of commodity being exported dips too low, the cost of this infrastructure becomes prohibitive at smaller, specialty volumes.

This dependence highlights the importance for action from the specialty sector, but also the need for the inclusion of participants across the sector, particularly larger buyers of all grades of coffee. Without the economies of scale from the commodity trade, exporting specialty will become prohibitively expensive, if not impossible in many origins. The concentration of production in relatively few countries is problematic for everyone—it reduces liquidity, increases vulnerability to production-disrupting climatic events, and potentially perpetuates the price volatility issue since it gives a few countries increased influence over the available supply.<sup>40</sup>

At the same time, the specialty coffee sector has unique attributes that offer opportunities for lasting change. Specialty has paved the path to make coffee an environmentally and socially sustainable product. Its innovative beginnings as well as the strength of specialty brands and their ability to communicate with consumers is an asset. The specialty sector led the coffee industry out of a long decline of consumption in the end of the twentieth century as young entrepreneurs and innovators challenged the role of mass production in industrialized food systems.<sup>41</sup> Quality-focused independent roasters steadily captured the imaginations and the spending of consumers introduced to a better cup of coffee by the likes of Starbucks, but groomed for connoisseurship and curiosity by emerging technology, compelling stories, and access to information. The new century gave rise to a generation of millennial consumers who care about the origins of their favorite foods and beverages and how they got onto their plates or into their cups and glasses. This generation strongly identifies with issues of sustainability, equity, and transparency and believes they have the technological wherewithal to confirm their positions.<sup>42</sup>

## What Is the SCA's Role?

The SCA, with its history of providing leadership, collaboration, promotion, and education for the specialty coffee industry, has a unique and important leadership role to play in addressing the price crisis. The SCA's core values codify the organization's commitments to building both a sustainable coffee industry and a community of communities that includes diverse voices. Since 2015, the Sustainability Department of the SCA has been working, with the support of volunteers, to raise awareness about the obstacles to profitability facing coffee farmers and has built on this foundation of knowledge and research, including the 2017 *Farm Profitability Report* cited above. With a wide network of coffee retailers and business-to-consumer members, the SCA is also uniquely positioned in terms of its access to out-of-home coffee consumers, who have played an important role in driving the sector's growth since the last price crisis in 2002. Addressing this issue will require challenging the status quo, changing business practices, and reconsidering assumptions—something the SCA as a neutral organization is willing and able to do credibly—and socializing its conclusions and recommendations. With its ability to convene value chain actors, NGOs, donors, and public sector representatives as well as the powerful dissemination network offered by its events, the SCA has authority and influence beyond the boundaries of its membership, reaching the entire specialty coffee sector. As an industry leader with an audience that spans the coffee value chain, the SCA has a responsibility to address the price crisis and in doing so honors its commitment to living its values.

---

<sup>40</sup> International Coffee Organization, "Background Paper: Achieving the Sustainable Development Goals in the Coffee Sector," May (2019).

<sup>41</sup> Jean C. Buzby and Stephen Haley, "Coffee Consumption over the Last Decade," n.d.

<sup>42</sup> S&D Coffee and Tea, "HOW TO DELIVER A BETTER BEVERAGE," 2019.

# Our Approach

The work of the Price Crisis Response Initiative has been informed by systems change thinking and methodologies. A systems approach shifts the focus from individual parts of a system to how the parts are organized, recognizing that interactions of the parts are not static, but dynamic and fluid. This approach also acknowledges that change is non-linear and happens at multiple levels—from the niche to landscape level changes—over multiple time scales.



The specialty coffee sector faces many complex interrelated challenges, and it is clear many of the fundamental systems underpinning this sector are entrenching inequity and unsustainable practices. Unless we can understand the bigger picture in which these challenges sit, we will only end up mitigating problems, providing superficial solutions, or creating unintended consequences.

An intentional process designed to alter the status quo by shifting the function or structure of an identified system with purposeful interventions<sup>43</sup>, a systems change approach aims to bring about lasting change by altering underlying structures and supporting mechanisms which make the system operate in a particular way. These can include policies, routines, relationships, resources, power structures, and values.<sup>44</sup>

Understanding the systems that underpin the problem can help determine the best points of leverage—areas in the system where we can have maximum impact for minimal effort. Donella Meadows, leading scholar and systems change theorist, identified 12 levers of change for shifting a system. The most powerful levers are ones that shift culture and psychology to shift paradigms (see Figure 1). Of course, the higher the lever, the more impact it has, but the more difficult it is to “unlock.” Therefore, this research sought to develop recommendations for action that:

- ▶ Delivers change in the long-term, rather than offering a short-term “fix”
- ▶ Recognizes the interdependence of different trends and issues
- ▶ Uses a system mapping exercise to understand the purpose and dynamics of the current system
- ▶ Identifies, in order to avoid, potential unintended consequences of shifting the system
- ▶ Clearly highlights assumptions that need to be tested
- ▶ Are viable at a global scale (rather than optimizing a particular market or local context at the expense of others)
- ▶ Delivers structural change that helps to shift behavior across the industry, rather than seeking to intervene at the scale of individual business models

<b>PLACES TO INTERVENE IN A SYSTEM</b> (in increasing order of effectiveness)
12. Constants, parameters, numbers (such as subsidies, taxes, standards).
11. The sizes of buffers and other stabilizing stocks, relative to their flows.
10. The structure of material stocks and flows (such as transport networks, population age structures).
9. The lengths of delays, relative to the rate of system change.
8. The strength of negative feedback loops, relative to the impacts they are trying to correct against.
7. The gain around driving positive feedback loops.
6. The structure of information flows (who does and does not have access to information).
5. The rules of the system (such as incentives, punishments, constraints).
4. The power to add, change, evolve, or self-organize system structure.
3. The goals of the system.
2. The mindset or paradigm out of which the system — its goals, structure, rules, delays, parameters — arises.
1. The power to transcend paradigms.

Figure 1: Leverage Points: Places To Intervene In A System.

<sup>43</sup> Pennie G. Foster-Fishman, Branda Nowell, and Huilan Yang, “Putting the System Back into Systems Change: A Framework for Understanding and Changing Organizational and Community Systems,” *American Journal of Community Psychology* 39, no. 3–4 (2007): 197–215.

<sup>44</sup> P. G. Foster-Fishman, “How to Create Systems Change,” Lansing, MI: Michigan Developmental Disabilities Council, 2002.

## Research Process Overview

In accordance with our principles, our work was grounded firmly in participatory research approaches and techniques all with the objective of handing power from the PCR research team to community members. Stakeholders have steered the research agenda itself, the process, and the actions. Further, via processes like the Three Horizons Workshop, sector stakeholders themselves analyzed the information generated.

The overall approach included desk research, stakeholder interviews, and four industry convenings representing a total of 160 industry participants. Additionally, crowd-sourced peer reviewers were invited to provide commentary on the project outputs including summaries of the first three workshops, the causal loop diagrams, and the PCR Initiative's Terms of Reference document. Reviewers were also invited to provide insight in their own words based on their own buying practices, supply chain, and values. More than 200 community members requested the peer review materials and the PCR team received and synthesized more than 50 responses. Despite the open spirit of the peer review process, the choice to hold convenings in conjunction with SCA events and other industry summits in the US, Europe, and Brazil, as well as the choice to conduct webinars in English and Spanish promoted through SCA communications channels, left gaps in the feedback, most notably from producers and producer organizations from different parts of Africa and Asia. To better understand the unique opportunities and challenges of these regions, the PCR team organized two invitation-only interactive webinars specifically to engage and learn from coffee industry actors in Africa and Asia. Twenty-six attendees, predominately from Indonesia, joined the webinar focused on Asia; the webinar focused on Africa was attended by fourteen stakeholders from Kenya, Uganda, Ethiopia, and Nigeria.

One of the consequences of the PCR's choice to prioritize inclusivity and engagement with a wide variety of stakeholders was that each workshop gathered a brand-new set of people, none of whom had worked with the PCR team prior to their participation in the convening they attended. At each event, the facilitators used pre-work and framing to help participants understand how they would be building on work that had been done previously and what their roles

in the overall PCR process would be, but some amount of repetition was inevitable. As a result, the progress of the PCR to identify its recommended interventions was not linear, and some interventions and obstacles that appear in early meetings disappear for subsequent ones, only to reappear towards the end of the year as the PCR team synthesized all of the inputs from the research process.

## Principles That Informed Our Work

In the request for proposals that led the SCA to choose Forum for the Future as its facilitator, the Price Crisis Response team codified a series of principles for how it would pursue the research needed to achieve its objectives:

- ▶ **Collaborative:** The PCR will bring together research and insights from other initiatives, and interviews will be used to identify collaboration opportunities.
- ▶ **Inclusive of diverse opinions:** This work will be built with respect for the expertise in the specialty coffee industry but will seek to challenge assumptions. The PCR will utilize varied epistemologies and seek examples from different industries because we recognize that while there has been much good work to date in the coffee industry, with "business as usual," the industry has struggled to realize large-scale change.
- ▶ **Open:** The format for the work will support the sharing of ideas, thoughts, and analysis.
- ▶ **Future-focused:** We will challenge ourselves and everyone involved to think long-term and suspend skepticism about the possibility of change. This work will go beyond short-term responses and into long-term thinking aimed at systemic change.
- ▶ **Action-oriented:** This work is not solely an academic exercise and should serve as an entry point to inspire change in our industry, as well as establishing a model for other industries to follow.



**Table 1**

Research process summary including the aim and approach taken for each stage of research—some of which occurred concurrently—as well as the output

Research Stage	Aim	Approach	Output
1. Define the problem and develop a vision	Define the problem we are trying to address and develop a vision for the future.	The core PCR team, in conjunction with the SCA Board of Directors, defined a hypothesis of the problem and a draft of the vision statement which were tested and refined throughout the process outlined below.	Problem statement & vision statement (see Introduction)
2. Identify "no regrets" actions	Identify actions that can be enacted in the short-term to deliver relief for the current price crisis.	<p>May 2019, New York City, US: A group of 27 stakeholders came together to test the team's thinking on the scope and definition of our work and to identify immediate actions (termed "no regret" actions) to address the crisis. "No regrets" actions were defined by:</p> <ul style="list-style-type: none"> <li>▶ principle of 'no harm'</li> <li>▶ doesn't divert significant resources</li> <li>▶ can deliver some fast, short-term action</li> <li>▶ is undertaken recognizing it is not 'the' solution but is taking us in the right direction</li> </ul> <p>The ideas were then collectively mapped onto a matrix of 'potential for impact' x 'fits the definition of no regrets'.</p> <p>After the workshop these were clustered into specific work programs and pursued by subcommittees of the PCR core team.</p>	No regrets action list (see Appendix B)
3. Explore the root causes	Identify the root causes underpinning the dynamics driving value distribution in order to identify opportunities for driving change.	<ul style="list-style-type: none"> <li>- Causes of the chronic price issue were identified and grouped in the New York workshop, followed by an exercise using the Iceberg Model and a 'five whys' exercise to help identify the root causes.</li> <li>- June 2019, Berlin, Germany: A group of 31 stakeholders gathered to iterate this exercise using the key causes identified in the New York workshop.</li> <li>- These diagrams were synthesized into four causal loop diagrams using common components and Avance attendees were given the opportunity to add any comments.</li> </ul>	Four causal loop diagrams for the root causes of the price crisis (see Appendix C)

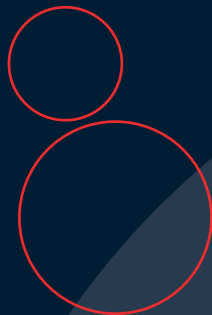
Research Stage	Aim	Approach	Output
4. Map the system	Gain further clarity on how the system is currently functioning in order to begin to identify opportunity areas for action.	<ul style="list-style-type: none"> <li>- July 2019, Campinas, Brazil: 75 stakeholders came together at Avance to map the coffee system and hypothesize intervention points for long-term action. Participants were asked to draw layers of information onto the system map: people and connections; stages/processes that are missing; assets/inputs; flows of money; flows of information and knowledge; and current initiatives working to solve the problem. The room was then asked to analyze the system and explore: <ul style="list-style-type: none"> <li>▸ What power is held in different parts of the system?</li> <li>▸ What output(s) does this system produce?</li> <li>▸ What is the goal of this system? How do you know?</li> <li>▸ Who benefits from this system?</li> </ul> </li> </ul>	Systems map (see Appendix E)
5. Undertake a landscape assessment	Extract learnings on what has and hasn't worked to address economic inequity in the coffee industry and adjacent industries.	<ul style="list-style-type: none"> <li>- Members of the PCR team were asked to identify industry-level initiatives, like a platform, national program, or standard beyond individual business model work (in coffee or other similar agricultural crops) that have: <ul style="list-style-type: none"> <li>▸ Initiated interventions to deliver change (and moved past convening and dialogue stages)</li> <li>▸ Set out to deliver change on economic sustainability</li> <li>▸ Have tested a mechanism to directly impact pricing or trading practices of buyers (rather than interventions aimed at changing producers' behavior)</li> </ul> </li> <li>- A rapid set of desk-based research was used to assess each intervention based on whether (a) the intervention remains of interest for our research based on the above criteria or (b) it is mature enough to have results/learnings and there is enough literature for us to review. This process significantly reduced the number of interventions for further research—in particular because few initiatives actually look to address the pricing or trading practices of buyers (they are very focused on producer side actions).</li> <li>- The short list of interventions was developed into a case study using desk-based research and, where possible, interviews. These were assessed to understand what learnings there were from the process of how the intervention was conducted, as well as the effectiveness of the intervention itself.</li> </ul>	Case studies (see Appendix A)

Research Stage	Aim	Approach	Output
6. Explore the role of the specialty industry	Explore the role of the specialty industry in driving change on price and identify opportunity areas for where the specialty industry is best placed to create long-term systemic change.	<ul style="list-style-type: none"> <li>- Berlin workshop participants were asked to identify the strengths and weaknesses of the specialty industry.</li> </ul>	Strengths and weaknesses analysis of the specialty industry (see Appendix D for the full exploration)
7. Explore where the SCA is well placed to catalyze change	Identify areas where the SCA is well placed to catalyze action among the specialty sector, given other coffee initiatives working on price.	<ul style="list-style-type: none"> <li>- The team used the work of Conservation International's mapping of major coffee multi-stakeholder initiatives that are looking at the price crisis and provided an outline of their activities. This was supplemented by the PCR team's understanding of and participation in other initiatives working in this space.</li> <li>- Opportunity areas were identified at the Berlin workshop, by collating ideas generated at the World Coffee Producers Forum and in the PCR team, and at the Three Horizons Workshop in Washington, DC.</li> <li>- Opportunity areas were assessed and prioritized in the Avance workshop using the following diagnosis questions: <ul style="list-style-type: none"> <li>▶ Does it have the potential to rebalance power in the system?</li> <li>▶ Does it have a chance to get at the "deeper levels of change" on the systems change Iceberg Model?</li> <li>▶ Does it work, even in the face of large-scale external pressures like climate change?</li> <li>▶ Does it have the potential to work at scale? Could many people adopt it and it still work?</li> <li>▶ Has it, or something similar, been tried before without success?</li> </ul> </li> <li>- The outputs of Avance were synthesized and analyzed alongside the causal loop diagrams to identify a full list of possible opportunity areas, alongside the specific problems they are trying to address in the system.</li> </ul>	<p>Overview of key multi-stakeholder initiatives working on price in the coffee sector (see Appendix F for a full overview of each initiative)</p> <p>List of potential opportunity areas (see Table 4 and Appendix E.2)</p>
8. Synthesize recommendations	Finalize list of recommended intervention points for the specialty coffee sector and create a plan against these intervention points.	<ul style="list-style-type: none"> <li>- Participants in the Three Horizons Workshop identified short-, medium-, and long-term actions to match the intervention areas that have emerged throughout this process.</li> <li>- At the conclusion of the convenings and research process, a subset of the PCR team synthesized all of the recommendations and interventions from the stakeholder workshops and plotted them against the SCA's strategic plan in a two-day meeting to develop a plan for action in the coffee sector and within the association.</li> </ul>	Final list of recommended action areas for specialty coffee.

# Landscape Assessment

The landscape assessment focused on interventions that specifically sought to address inequitable bargaining power in trading relationships. This does not diminish the importance of working directly with producers, e.g., through Poverty Graduation Programs, which have been shown to result in income increases for smallholders of 50% or more and can be achieved at scale.<sup>45</sup>

<sup>45</sup> Mars Incorporated, "Farmer Income Lab," 2018.



However, while breaking the cycle of poverty and improving the efficiency of smallholder farming are essential for improving the short-term outcomes, they do not fundamentally change the economic system that led to the erosion of smallholder livelihoods and resilience in the first place. The PCR Initiative specifically has chosen to focus on the buyer side of the equation, believing increasingly that this is a “buyer problem” not a “producer problem.”

With a lens towards exploring what can be changed on the “buyer side,” the following six interventions were explored:

- ▶ Indian minimum support price
- ▶ World Banana Forum’s distribution of value working group
- ▶ Tea 2030’s tea swaps pilot
- ▶ Malawi Tea 2020 work to close the living wage gap
- ▶ Fairtrade International coffee minimum pricing and premiums
- ▶ The partially liberalized cocoa sector in Ghana’s minimum pricing

Each intervention was assessed to draw out findings related to the process of how the intervention was implemented and the effectiveness of the intervention itself. The summaries of each case study are in Appendix A, and two selected case studies and high-level findings are highlighted below.

## Highlighted Case Studies: Fairtrade and the Partially Liberalized Ghanaian Cocoa Market

### Fairtrade International

Fairtrade International is a non-profit, multi-stakeholder association that works to share the benefits of trade more equally through standards, certification, producer support, programs, and advocacy. The organization is 50% owned by producers who are represented in all decisions regarding governance, standards, and certifications. Fairtrade attempts to upend traditional buying practices by establishing a price floor and providing an additional, communally managed premium for all Fairtrade certified producers.

The minimum price acts as a safety net for producers that helps buffer them from downswings in volatile markets. The price floor for washed Arabica coffee has been \$1.40/lb. since 2011, and as prices in 2019 hover around \$1/lb. on the C market, it is evident that Fairtrade farmers are insulated from current low prices. Certified organic farmers enjoy an additional \$0.30/lb. premium.

Fairtrade certified farmers receive a \$0.20/lb. premium that goes into a communal fund for farmers and farmworkers to spend on community projects as they see fit. Historically the premium has funded projects to improve community education and healthcare, mitigate against climate change, and improve coffee yield and quality. Importantly, farmers and farmworkers democratically decide what projects to undertake. The minimum price and both the organic and community premiums act as a baseline for coffee pricing: producers and traders can also negotiate higher prices on the basis of quality and other attributes.

The effects of participation in Fairtrade International certification for coffee farmers have been mixed. Two notable criticisms of Fairtrade certification are: first, the minimum price is too low and doesn’t account for dignified livelihoods, costs of production, or contribution to household income; and, second, the limited sales, both in terms of Fairtrade coffee sold in the coffee market (approximately 6%) and the amount of Fairtrade certified coffee produced versus the amount sold as certified (30%), result in a limited impact for participants.

## Partially Liberated Ghanaian Cocoa Market

Ghana is the second largest cocoa producer in the world and accounts for almost one-fifth of global cocoa supply. Like many tropical tree crops, the Ghanaian cocoa sector has suffered from low and volatile prices, which were partly responsible for the precipitous decline of cocoa production in the early 1980s, along with ageing and diseased trees. Worsening these conditions was a poor enabling environment characterized by high inflation rates and export taxes (cocoa revenues accounted for 30% of total government revenue between 1955–1970).<sup>46</sup>

To address these concerns, a series of country-wide reforms have been implemented by the revitalized Ghana Cocoa Board (COCOBOD) since 1984, with goals that included: an increase in producer price, an increase in producer proportion of the FOB price, and a stabilization of the supply of cocoa.

To achieve these goals, the COCOBOD:

- ▶ Provides extensions services, conducts research, and subsidizes inputs
- ▶ Offers educational and social services to improve household welfare
- ▶ Reduced export taxes
- ▶ Implemented a country-wide price minimum

Ghana has successfully reduced cocoa farmers' exposure to price volatility and has increased both the price and the proportion of the FOB price that farmers receive. Cocoa farmers benefit from stable access to licensed buyers, an increased supply of agrochemicals, and timely payments.<sup>47</sup> Despite these notable successes, the program faces a number of challenges, particularly that it currently operates at a net loss. For this reason, the long-term sustainability of the program is uncertain.<sup>48</sup> Anecdotal evidence suggests that partial liberalization has negatively affected cocoa quality, though Ghana continues to enjoy a high reputation for quality cocoa through centralized marketing and quality control.

<sup>46</sup> M. Vigneri and Shashi Kolavalli, "Growth through Pricing Policy: The Case of Cocoa in Ghana," *Background Paper for UNCTAD-FAO Commodities and Development Report*, 2017.

<sup>47</sup> Christopher L. Gilbert, "Value Chain Analysis and Market Power in Commodity Processing with Application to the Cocoa and Coffee Sectors," *Commodity Market Review*, 2008.

<sup>48</sup> Antonie Fountain, and Friedel Huetz-Adams, "Cocoa Barometer," *Cocoa Barometer*, 2018.

## Table 2

Key learnings from the case study review

Key Learnings from the Case Study Review	Example Actions
▶ Develop personal trusted relationships	- An anonymous scorecard between buyers and sellers helped to build trust - Regular in-person meetings build trust, transparency, etc.
▶ Develop a shared understanding and vision	- Don't underestimate the time it takes to develop shared expectations - Demonstrate the realities of living below and at a living wage so people understand and build empathy - Carry out a value chain assessment to show responsibilities along the value chain and define a future vision together
▶ Provide the opportunity for a level playing field	- Calculate living wage for all major production countries - Make sure you have retailers and key production countries involved early on
▶ Identify your leaders (or potential leaders) early on	- There may be policy contexts which are already encouraging leadership - A public declaration can be very effective
▶ You can work collectively to address price within anti-trust law	- Minimum pricing allowable if voluntary and overseen by independent body - Focus goals around a "decent standard of living" (whether this is then delivered by strategy and/or price)

Key Learning from the Case Study Review	Example Actions
<ul style="list-style-type: none"> <li>▶ Develop tracking and accountability mechanisms</li> </ul>	<ul style="list-style-type: none"> <li>- Measuring the wages provides accountability</li> <li>- Currently little accountability for how the Fairtrade premium is spent which may lead to a concentration of power and wealth</li> </ul>
<ul style="list-style-type: none"> <li>▶ Many approaches are expensive to maintain</li> </ul>	<ul style="list-style-type: none"> <li>- High investment needed to keep the Ghana program running</li> <li>- Maintaining a certification is expensive</li> <li>- When some of the cost goes to producers, this can be a barrier to entry and concentrate wealth</li> </ul>
<ul style="list-style-type: none"> <li>▶ Working as a collaboration is powerful (and differences in approaches can be costly)</li> <li>▶ Alignment around methodologies is key</li> <li>▶ You need a welcoming legal and institutional context</li> <li>▶ Taking a multi-pronged and iterative approach can be powerful</li> <li>▶ Consider the business case for involvement e.g., buyers already have their own price smoothing mechanisms</li> </ul>	

### Key Learnings Related to the Effectiveness of the Interventions

There remains limited evidence of interventions that seek to change buyers' practices. Even when focused on the role of the buyer, initiatives often focus on enabling the producer to perform better within the existing trading and pricing structure, for example by raising productivity or quality. Where initiatives do focus on the role of the buyer, they typically focus on the power of individual businesses

or supply chains to help raise people out of poverty (e.g., through direct trade models), but don't look at changing the overarching system to create a mainstream shift.

Of the six interventions reviewed, the work on tea swaps and in the World Banana Forum doesn't have any accompanying data yet to assess whether the intervention has shifted end outcomes for farmers. Of the other interventions included in the research, three have had some success in raising on-farm incomes and one has not.

**Table 3**

Key learnings related to the effectiveness of the case studies

Key Learnings Related to the Effectiveness of the Case Studies	
1. Minimum pricing doesn't take into account productivity or contribution to household income. While it is possible to raise incomes/wages through minimum pricing or collective bargaining agreements, these increases have not been enough to cover a living income/wage.	8. Minimum pricing or risk-based tools don't address any oversupply in the market on their own.
2. Minimum pricing does not necessarily change the income of the farmer, unless it is a minimum price at the farmgate.	9. There is still a tendency for mechanisms that aren't market-wide to benefit those that already have more wealth or power.
3. Buyers are nervous about the affordability of paying living incomes/wages.	10. When minimum pricing is combined with a restricted number of players in the market, the competition is over market share rather than price
4. Most initiatives are focused on the current risk or cost of production, rather than the cost of sustainable production.	11. Voluntary schemes, such as Fairtrade, are only a small proportion of the market.
5. Producers are concerned about minimum pricing when it is not a level playing field.	12. In some places, even if everything is operating at maximum efficiency, it is not enough for people to earn a living income.
6. Scope for the calculation of cost of production is key to prevent it being seen as arbitrary and to make sure it keeps pace with the changing costs of inputs.	13. Minimum pricing may reduce incentives for quality.
7. Swaps mechanisms help to protect against volatility but may not help with the long-term downward pressure on prices.	14. Setting minimum pricing may artificially depress the market price in periods of higher prices.
	15. Self-assessment cost of production tools may put the power back in the hands of the producer.



## Assessing Other Sector Collaborations

The current coffee price crisis has been an important topic of discussion within different multi-stakeholder initiatives and organizations across the coffee sector, most notably the International Coffee Organization, the Sustainable Coffee Challenge, the Global Coffee Platform, IDH The Sustainable Trade Initiative, and the World Coffee Producer Forum. To help avoid duplication of work in the sector and to provide leadership on behalf of specialty coffee communities, the PCR core team has worked in close coordination with these initiatives. While a more detailed assessment of these initiatives and others can be found in Appendix F, a brief synopsis of each of the major collaborations appears below:

- ▶ The International Coffee Organization (ICO) conducted research and a series of sector-wide dialogues over 2019 that culminated in a CEO and Global Leaders Forum in September of 2019, where the London Declaration laid out recommendations for the coffee sector.
  - ▶ In June of 2019, the Global Coffee Platform (GCP) published a Call to Action highlighting activities aimed at driving policy changes, leveraging national multi-stakeholder coffee platforms, and reducing speculation, among other strategies to address the price crisis.
  - ▶ In addition to participating in the PCR, the Sustainable Coffee Challenge (the Challenge) has provided guidance to industry actors on concrete measures they can take individually and collectively to address price volatility in their supply chains, as well as on amplifying the efforts of partner organizations like the GCP, the ICO, and the SCA.
- ▶ IDH the Sustainable Trade Initiative convened a Taskforce on Coffee Living Income (TCLI) that met virtually and in person over the course of 2019 with the goal of quantifying the living income gap for coffee producers in Colombia across multiple regions, with varying conditions for production, and selling into different market segments (“sourcing archetypes”), and will issue its final report in early 2020.
  - ▶ The World Coffee Producer Forum (WCPF) commissioned a team from Columbia University, led by Dr. Jeffrey Sachs, to conduct a study on the viability of coffee and the resulting report, *Achieving Economic Sustainability in the Coffee Sector*, was presented in draft form at their second conference in Brazil in July 2019 and published in October of the same year.

The PCR has actively supported each of the above initiatives, and to the extent that these other entities have arrived at conclusions, this report has much in common with their outputs. A few key differences are worth noting, however: first, nowhere else does the role of specialty coffee (as a subset of the sector that is dependent on, but also distinct from, commercial coffee) receive attention; second, none of the other initiatives has approached the issue through a systemic lens; and third, opportunities for direct engagement and feedback to other initiatives have (in most cases) been limited to in-person meetings comprised of invitees and subject matter experts, whereas the PCR codified its commitment to inclusivity upon inception and submitted in-process materials to anyone interested in receiving them.

# Key Stakeholder Meetings

Four key stakeholder meetings were held in the United States, Germany, and Brazil. These meetings were a key for two reasons: first, they ensured that the process of the PCR Initiative aligned with its core principles of collaboration, inclusivity of diverse opinions, and openness; and second, they were essential to building a comprehensive knowledge of the coffee sector that forms the foundation of systems change theory.

## New York, US

On May 9, 2019, the SCA held its first stakeholder convening in the name of the coffee price crisis with the objectives of aligning around a problem statement, developing ambassadors for the work of the PCR and other industry initiatives, and identifying short-term actions. The majority of attendees hailed from the United States and represented roasters, traders, NGOs, and other value chains facing similar issues as coffee. Overall, participants expressed great energy to work collaboratively in the face of the price crisis and expressed a shared sense of an inflection point in the coffee sector, as well as across tropical commodities.

The PCR team began the meeting by asking attendees to be critical friends of the initiative and help make it better, and by sharing the draft of its problem statement, which the participants discussed before arriving at the following version: chronically low prices and pricing volatility, combined with the systems that deter people from paying higher prices, contribute to economic unsustainability and undermine the long-term viability of the coffee sector.

After agreeing on the problem in question, participants were asked to think about why the sector faces this problem and then, after responses had been grouped together around common themes, to begin to dig deeper into those conclusions by asking “why?” again and again. For example, if a power imbalance in coffee value chains is a major contributor to this problem, why is there a power imbalance? If the power imbalances result from or are exacerbated by opacity in value chains, why are value chains opaque? This root cause analysis established a common framework of understanding for the first workshop and also became the foundation for the PCR’s second convening in Berlin, Germany.

To highlight what has and has not worked in past interventions and other sectors, participants considered three case studies: outcomes from a price crisis meeting on coffee held in 2002; the impact of the Fairtrade model; and insights from the World Banana Forum’s pursuit of living income benchmarks. These case studies contain important lessons, including that collective accountability is critical for action; that specialty coffee has a unique role to play; that covering the cost of production isn’t enough—economic viability for producers must be the long-term goal; that a powerful, entrenched system will impede the success of specific and isolated interventions; that living income offers an important route to constructive discussion of how to address the price crisis; and that retailers need to be engaged early on.

Discussion of actions to take focused on “no regrets” actions, which were defined as actions that would do no harm, not divert significant resources, and be undertaken knowing that they would not be “the” solution but would take the initiative in the right direction and help to address immediate needs. The following characteristics were also requirements of no-regrets actions:

- ▶ They could not reinforce current, unsustainable power dynamics.
- ▶ They would help the PCR build longer-term momentum.
- ▶ Even in the absence of complete consensus around implementation strategies or their potential to create long-term change, the assembled stakeholders could still agree on them.

After charting potential actions on a graph depicting opportunities for impact on one axis and the cost of implementation on the other, participants identified five short-term focus areas for the PCR (see Appendix B for details):

- ▶ Represent the coffee industry in calling for humanitarian support
- ▶ Raise awareness of the price crisis and the need for action
- ▶ Provide inspiration to the specialty coffee community;
- ▶ Develop an SCA position on competition law
- ▶ Amplify the living income movement

Over subsequent months, the PCR team pursued each of these actions to differing degrees depending on the extent to which they required diverting resources—most notably, the resource of time. The actions of raising awareness, providing inspiration, and amplifying the living income movement were immediately integrated into the PCR’s cycle of communication across the SCA’s marketing and communication channels, while developing a position on competition law and calling for humanitarian support—which is a less familiar territory for the association—necessitated a level of investigation and laying of groundwork that made them incompatible with the definition of a no-regrets action detailed above. Both have progressed, but slowly: discussions with humanitarian organizations and policymakers on roles for specialty coffee buyers are underway, and the PCR has received pro bono legal advice from a firm specializing in competition law to inform a potential statement by the association.

## Berlin, Germany

The convening in New York in May was followed by a gathering of 30 stakeholders in Berlin, Germany, at the SCA World of Coffee conference and trade show, on June 7, 2019. In contrast to the May meeting, participants in Berlin came from Europe, Central and South America, and Africa, but although there was more representation of farmers and farmer groups than in the first meeting, the absence of humanitarian leaders, policy advisors, and the finance sector was noted as a gap in need of addressing.

Workshop discussions centered around four key dynamics—selected based on discussions during the first PCR workshop in New York City—that perpetuate the price crisis in coffee. After undertaking a brief root cause analysis (asking “why?”), participants sought to identify how these dynamics are reinforced by policies, mindsets, and cultural factors. The four dynamics are listed below along with selected results that reinforce those dynamics in a “causal loop”<sup>49</sup>:

### 1. Low prices don't cure low prices (in the short-term), because...

- a. People (not only producers) believe that coffee is a desirable crop, because
  - i. Retail prices are not low, and
  - ii. Market information lags.
- b. It is difficult to leave coffee production, because...
  - i. Investment into alternative crops is not approached systematically,
  - ii. The cost to remove coffee trees is high,
  - iii. A dearth of information and support makes it risky to switch, and
  - iv. The capital required to make changes is not affordable.

### 2. Most consumers are perceived not to care, because...

- a. Transparency and accountability around economic sustainability are rare, because...
  - i. Brands tell sustainability stories without an economic element, and
  - ii. Antitrust law stifles the sharing of price information.
- b. Consumers are confused, because...
  - i. The coffee sector lacks a consensus on a definition for “sustainable coffee,” and
  - ii. Specialty coffee is perceived as directly supporting growers already.

### 3. Traders and roasters are consolidating, because...

- a. Consolidation enables greater control over market prices, because...
  - i. Competition is diminished, and
  - ii. Acquisitions reduce transaction costs.
- b. Scale reaches a greater share of the available customer base.

### 4. Money and power are concentrated, because...

- a. Inherited colonial and extractive mindsets remain among key decision-makers, because...
  - i. Homogenous companies make homogenous decisions, and
  - ii. Coffee's economic model is based on slavery and low-cost labor.
- b. Entities in industrialized nations are increasingly dominant, because...
  - i. Organizations in industrialized/colonial nations are able to invest in new technology and product development, and
  - ii. The power of these entities forces producers to be price-takers.

With the preceding root cause analysis exercise in mind, participants worked in small groups to determine the

---

<sup>49</sup> A full list of causal loops can be found in Appendix C.

relative strengths and weaknesses of the specialty coffee sector in addressing the key issues (see Appendix D for the full exploration). Among the strengths identified for the sector were: the appeal of highly differentiated products to empowered consumers; the positive perception of coffee consumption; and the role of coffee in building relationships, fostering community, and stimulating progress. Weaknesses included a lack of clear and cohesive messaging about the meaning of “specialty” and challenges consumers face in identifying qualitative differences—both in product sourcing and delivery—as well as the failure of specialty to break away from the traditional market mechanisms which were developed for a commodity market approach to buying coffee.

In the final exercise of the workshop, participants individually prioritized opportunities and gaps for the PCR to address, which resulted in an unambiguous call to focus on driving behavior change and creating incentives for new models in the “middle” areas of the value chain (namely roasting and trading) where fewer actors hold more power than on either end—and where the SCA has a long history of deep relationships that strengthen its influence.

## Campinas, Brazil

In July of 2019, the PCR conducted its systems mapping workshop at the SCA's second Avance conference on coffee sustainability, which took place immediately following the World Coffee Producer Forum in Campinas, Brazil. This event drew 75 attendees from across the coffee value chain, with strong representation of producers and producer organizations from Central and South America. This increased producer representation was a priority for the PCR after its first two convenings in the US and Europe had gathered more roasters, traders, and NGOs than producers.

The goals of the workshop were to:

1. Bring people together to create a shared understanding of the coffee system beyond the status quo, including where they may be complicit in a problem and/or where they have power to act
2. Foster understanding about the interconnections in the coffee system and make choices about what is in scope and not in scope for action
3. Identify challenges and opportunities to address root causes of the price crisis

The workshop began with three stories from attendees about the experience of change in their lives. Based on these stories, table teams of seven to ten people discussed and identified the elements they thought were required to bring about true change, including mindset shifts, access to information, inclusivity, collaboration, and resilience in the face of resistance. Attendees were also introduced to the process of systems mapping, along with its goal to create a visual representation of the challenge we face—including key elements, relationships, flows of power, and structures—that will enable a group to identify the best areas for action. Against this backdrop, the facilitators introduced the seed-to-cup diagram used frequently by trainers, buyers, and other consuming-side actors to explain coffee's journey to novices. The simple diagram always includes the activities of growing, processing, shipping, roasting, and brewing coffee, with others—harvesting, grinding, storing—occasionally appearing. Although it's never referred to as a "map," it shapes the way coffee drinkers and coffee professionals alike understand the journey, as well as how (and whether) they see the actors who participate in the process.

Participants were divided based on their primary language (English, Spanish, or Portuguese) and through a participatory method, each table challenged the linear seed-to-cup story by mapping system elements, players, relationships, flows of power, flows of assets, money distribution, and knowledge centers. The resulting diagrams included additional activities like waste disposal, transportation, and plant fertilization, but more striking were the dozens of actors identified as contributing at every stage in the value chain, from often-marginalized farm workers to powerful financial institutions, that are missing from the prototypical diagram. (An example of this can be found in Appendix E, along with an example of a hand-drawn map created at one of the tables.)

Based on a new, more complex representation of the coffee system, tables were asked to analyze it by discussing the following questions:

- ▶ Who or what is missing from this map? Do you think this is intentional? Accidental? What are the consequences of this?
- ▶ What power is held in different parts of the system?
- ▶ What, if any, output does this system produce?
- ▶ What is the goal of this system? How do you know?
- ▶ Who benefits from this system?

Analysis of the maps<sup>50</sup> resulted in key insights, including:

- ▶ The producer is far from the consumer, and industry actors perpetuate this;
- ▶ An understanding of environmental and social costs of coffee production doesn't transfer along the chain from producers towards consumers;
- ▶ Information flows from producers to consumers, but not the other way;
- ▶ It is easy to make assumptions about "others" in the chain, their roles, and their relationships;
- ▶ The original map ignores different modes of consumption (e.g., domestic consumption);
- Of the many connections along the chain, the consumer has the fewest.

---

<sup>50</sup> A full list of insights can be found in Appendix E.

After the workshop, the alternative maps and insights that arose from the workshop were all synthesized into a graphic that aimed to represent not only the additional actors and actions identified by participants, but also aspects of the relationships between actors that gave rise to the price crisis, such as the consolidation of power and information in the roasting and trading roles, and the social and environmental systems that support the coffee system with water, sunlight, and other resources. This graphic (Appendix E.1) inspired a commitment by the SCA to create a systems map of its own that embraces complexity, recognizes previously invisible actors, tells multiple stories, and can be translated across the languages and cultures of the communities the association reaches.

The output of the workshop that most directly contributed to the PCR's forward progress was the draft list of intervention areas resulting from the tables identifying points of leverage (defined as areas in the system where you can have maximum impact for minimal effort) on their maps. Using the following criteria to test a list of possible solutions, the groups identified what they thought were the solutions that had the most potential to create the change needed in the system to address the root causes of the coffee price crisis as well as its current manifestations.

The criteria used to assess the possible solutions to determine the most promising interventions were:

- ▶ Does this solution have the potential to rebalance power in the system?
- ▶ Does this solution work even in the face of large-scale external pressures like the climate crisis?
- ▶ Does the solution have a chance to get to deeper levels of change<sup>51</sup>?
- ▶ Does the solution have the potential to work at scale? In other words, could many people adopt it, and if so, does it still work?
- ▶ Has the solution, or something similar, been tried before? Why didn't it work? Is this time different?

Based on this list of criteria, groups identified a list of solutions (Appendix E.2). The panel on the right lists the solutions identified by the PCR team as the ones that have the most potential to address the root causes of the price crisis and engender sustainable, systemic change.

<sup>51</sup> The Iceberg Model is a tool developed by systems change leader Donella Meadows to help situate a single event or occurrence in the context of structures that are often hidden—like the majority of an iceberg's mass is below the surface of the ocean—but which are critical to address if long-term change is the goal. <http://donellameadows.org/systems-thinking-resources/>

**Solutions identified as having the potential of being leverage points.**

**Encourage a living income/wage:** Establish new bargaining norms on based on dignified incomes. Companies can pursue covering regionally specific costs of sustainable production or closing the living income gap as the baseline for a pricing scheme. To ensure ethics around human dignity and supporting a producer's entire business (as opposed to only supporting the high-quality production), additional quality or delivery incentives (premiums or differentials) can be added

**Reimagine antitrust law:** Give those in the production chain an equal amount of legal protection against market power concentration and manipulation as is afforded to consumers.

**Support a consumer movement to send a demand signal to the industry:** Support raising awareness among consumers about their role in the true value of sustainable coffee and the current situation producers face in order to develop a strong demand signal.

**Boost domestic consumption:** Increase the power of the Global South in the coffee value chain and help address the oversupply in the market by boosting the proportion of domestic consumption.

**Deliver full price transparency across the supply chain:** Accelerate the information flow in the direction of producers to increase the bargaining power of different actors along the value chain and challenge the current distribution of value.

**Enable technology driven traceability:** Support technology that allows for a more direct connection between coffee consumers and the producing communities to build empathy and enable a shift in buying that supports sustainable value chains.

**Establish new price discovery mechanisms:** Establish price benchmarks for informing transactions that reflect the supply and demand of different grades of sustainable and quality coffees, rather than the overall supply and demand for commodity-grade coffee.

## Washington, DC, US

The final meeting was held in Washington DC in September of 2019. Meeting attendees joined from both the private sector and NGOs from within and outside the coffee sector. The purpose of the meeting was to decide on “the best” intervention points for specialty coffee to address the price crisis and create a plan against these intervention points to recommend to the sector. To achieve this, Forum and the PCR team guided the attendees in using the Three Horizons Framework, applying it both to the list of intervention points curated from the Avance meetings and new interventions points conceived at the meeting.

The Three Horizons Framework is a tool that supports “thinking about and visualizing the process of transformative change” by helping participants break down intractable and complex global problems. This framework suggests that there are three horizons that exist at any given moment:

**H1. Business as Usual:** The dominant way of doing things, essentially the status quo that is stable and reliable, but also in many ways no longer fit for purpose;

**H2. Disruptive Innovation:** Any social, political, technological, ecological, or economic disruption that challenges the business-as-usual H1 horizon;

**H3. Emerging Future:** The seeds of the future which exist today and will eventually grow and replace H1 as the predominant way of doing things.

Attendees were challenged to imagine Horizon Three, or the future state of being, that embodies the following vision: a specialty coffee sector that distributes value equitably, fosters resilient coffee farming communities that are economically prosperous, and values diverse producers of differentiated coffees. Then participants were asked to describe the dominant way of doing things, Horizon One. This included identifying the historical events that influenced our current way of being, indications that H1 is no longer sustainable, and barriers to transitioning to H3.

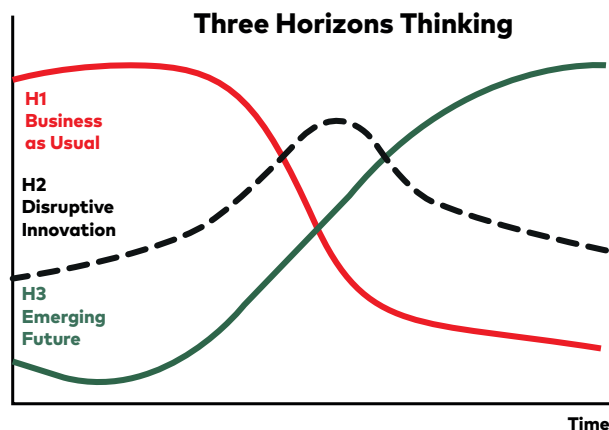


Figure 2: Steve Thompson, "Three Horizons Thinking," Zapnito, 2019.

---

<sup>52</sup> See Appendix

<sup>53</sup> Steve Thompson, "Three Horizons Thinking," Zapnito, 2019, <https://community.zapnito.com/users/4671-steve-thompson/posts/40954-the-three-horizons-framework>.



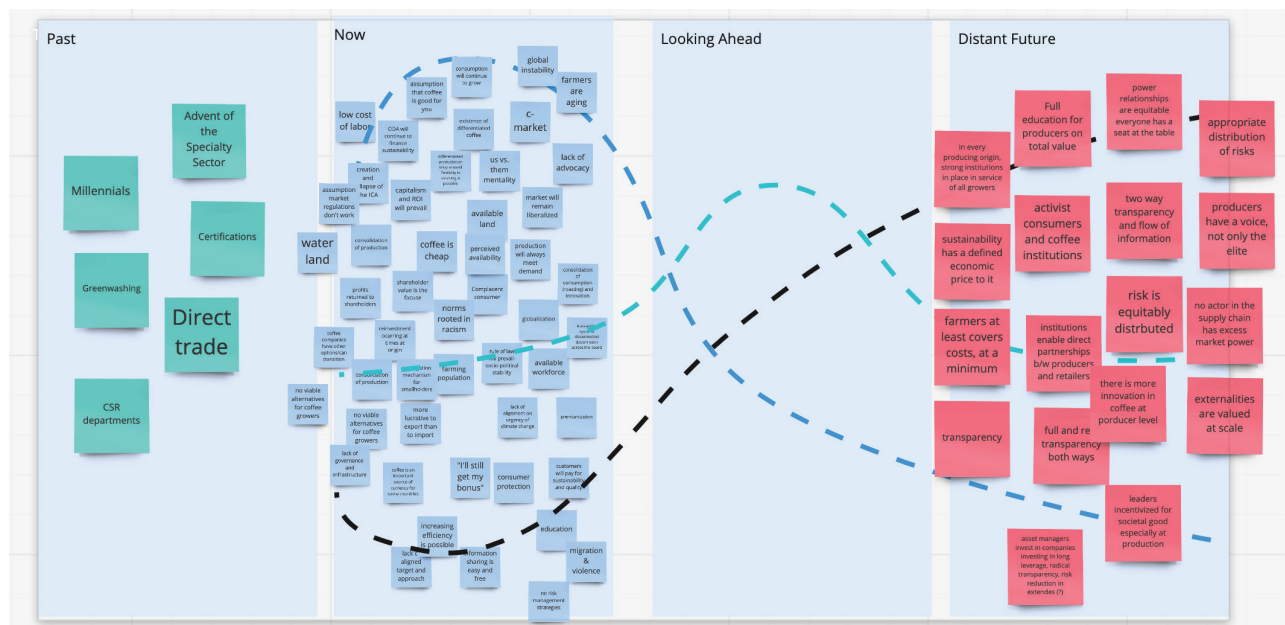


Figure 3: Three Horizons Visualization from Washington, DC Convening.

Attendees wrote their responses on sticky-notes and mapped them onto a white board with the Three Horizons Framework. Figure 3 is a digitized version of the result.

Finally, in small groups, participants were challenged to engage in “out-of-the-box thinking” to identify innovations in the Horizon Two space that would improve the distribution of value, risk, and cost along the coffee value chain and move the sector towards a third horizon where “farmers at least cover costs” and “externalities are valued at scale.” During this brainstorming session, participants were encouraged to regularly refer to the Three Horizons board they created to conceptualize how their innovations would help create the future envisioned by overcoming the barriers and addressing the unsustainable characteristics of Horizon One.

After being asked to select the best ideas, participants broke into groups to begin to detail some of the actions they believed would be required to undertake these seven chosen interventions:

1. **Two-way transparency:** Establish an online platform that would house contract data and cost information from buyers as well as producers. This intervention would help to rebalance power by making aggregated information available to producers and also aid in demystifying the costs associated with activities occurring later in the coffee supply chain, like roasting and retailing.

2. **Institutional innovation:** Identify opportunities to strengthen institutions that support coffee producers, potentially by conducting a needs assessment. The degradation (or absence) of public sector institutions leaves many coffee producers to cope with price and climate shocks without a safety net, and strong institutions would provide this much-needed support as well as counterbalancing the power of market actors.

3. **Consumer engagement:** Activate consumers to drive change in the sector through a campaign that focuses on prioritizing stories of producers over the scores and flavors of their coffees. Consumers hold power in their purchasing behaviors and with awareness of the coffee price crisis and inequitable value distribution, they will create a demand signal and exert pressure on industry actors.

4. **B Corp model:** Accelerate the momentum of the B Corp movement among businesses in the specialty coffee community. Benefit Corporations—B Corps, for short—are businesses that have codified their commitment to their stakeholders as well as their shareholders. In order to obtain the B Corp certification, a company must assess itself against a set of metrics that considers aspects of their business including their purpose, sourcing practices, community impact, and pay gap between employees.

- 5. Social and ecosystem services market:** Define and quantify the value of social and ecosystem services in the coffee supply chain. Coffee is not the only product of the system and these additional “products” could supplement producer incomes, appeal to buyers seeking to meet reporting commitments, and be used to leverage donor funding.
- 6. Crop insurance:** Levy a tax on coffee trades to fund climate insurance for coffee producers. Climate risk is borne disproportionately by producers and crop insurance is prohibitively costly (and unfamiliar) for smallholders, but insurance programs in other agricultural commodities and Nespresso’s recently launched program in Colombia warrant further research as examples for the sector.
- 7. Shared risk management strategies:** Launch a program to train producers and buyers to co-develop high-level risk management strategy for the relationship that ensures that the risks and benefits that result from market movement are shared. At present, risk management strategies are not widely used by coffee producers and the disaggregation of smallholders is a substantial barrier to using existing tools. Increasing the accessibility of these tools would insulate producers from market volatility, while also addressing value distribution by sharing any potential gain.

As the final in the series of four convenings, the conclusion of the Three Horizons represented a shift from gathering to analyzing feedback, not only from the participatory research conducted via in-person meetings, but also the desk-based landscape assessment and peer review processes.



# Peer Review

The SCA community places a high value on transparency and openness, and as a means to include these values in the work, the PCR included a process of sharing unfinished drafts of content, meeting notes, and program documents with the industry during several stages. Using the umbrella term of "peer review" to describe these tasks, the PCR solicited feedback to inform the work, while making the process inclusive to anyone who volunteered or asked to be included.

## Activities

Peer review included the following specific activities:

- ▶ Open call for review of meeting notes, PCR terms of reference, and one initial asset (causal loops) in draft form (August–September 2019)
- ▶ Targeted call for review of early draft of PCR report (September)
- ▶ Workshop participants were asked to review meeting notes and provide feedback, following each workshop (May, June, July, and September 2019)
- ▶ Webinars by targeted invitation, seeking specific geographic participation from producers and other coffee professionals in the Asia-Pacific region and Africa (November 2019)

## Process and Participation

The open call began with an invitation on the PCR Mid-year Update (webinar), inviting attendees to review drafts of materials prepared to date on August 19, 2019. More than 200 people responded, continuing into the next several weeks as members of the community continued to review the recording of the August 19 webinar as well as those who responded live. Peer reviewers were given a deadline of August 31, 2019, with the implication that their feedback would inform the materials for the September workshop and the draft of the report, as well as the actual feedback provided on the Causal Loops and Terms of Reference. The PCR received 31 submissions prior to the deadline, and 15 more after the deadline. Feedback sent after the deadline was incorporated into later materials.

The targeted call built on the submissions of the open call, where an early draft of the report was shared with a small, targeted group. Members of the PCR core team each identified a few of the first round of peer reviewers with whom to share the draft report, based on the quality of their initial feedback and interest, as well as balancing a diverse group of participants from around the world and various areas of the sector. Twelve professionals returned feedback on this round of content.

Based on initial workshops and peer review, and at the urging of SCA Board leadership, the PCR extended peer review to include two interactive webinars, in order to explicitly seek participation from producers in Indonesia and the Asia-Pacific region, and throughout various countries of Africa including established coffee producing regions and producers (Ethiopia, Kenya) and emerging producing countries (Nigeria, Ghana). Leveraging the networks within the SCA community, two webinars were convened on November 15, with participants voting on discussion questions from a list curated by the PCR and interacting with one another and PCR members throughout the webinar. The webinars were successfully attended by 26 professionals from the Asia-Pacific region and 14 from the Africa region. Both webinars are recorded for review of notes by the PCR team but were not shared more widely.

Demographic information was not explicitly collected by peer reviewers, but some self-identified their role in the sector and/or geography in their feedback given. Peer reviewers included roasters, NGO professionals, baristas, traders, producers, cooperatives, producer association professionals, academics, business owners/entrepreneurs, sustainability professionals, and SCA staff, from more than 20 countries and representation from North America, South America, Europe, Asia, Africa, and Oceania (Australia/New Zealand).

## Benefits

The peer review process is generally seen as successful in this initiative, particularly in the benefits it afforded the PCR team, including:

- ▶ Valuable feedback from the community
- ▶ Opportunity to socialize concepts of the PCR early on rather than waiting until the end
- ▶ Upholding commitments to the SCA's values, particularly of inclusiveness and transparency
- ▶ Including a multitude of voices in the work
- ▶ Not limiting feedback to known networks and existing relationships
- ▶ Access to thought leadership from many perspectives and experience levels
- ▶ Opportunity to identify areas where more work was needed, earlier
- ▶ Collaborative process
- ▶ Opportunity for continued dialogue
- ▶ High degree of participation

# PCR Outcomes: Final Recommendations

Following the desk research, stakeholder interviews, four industry convenings, learnings from our peer review process, and countless hours of discussion among the group, the PCR core group has identified a series of recommendations, selected for their strong potential to foment long-term change in the coffee sector. The recommendations, distilled here and in Appendix G, are grouped together along five main topic areas: governance/decision-making, information access/sharing, risk distribution, mindset shift, and finance/ownership distribution.



To realize its vision of a specialty coffee sector that distributes value equitably, fosters resilient coffee farming communities that are economically prosperous, and values diverse producers of differentiated coffees, the Price Crisis Response Initiative recommends specialty coffee stakeholders pursue the following goals through a variety of strategies:

- 1:** Create more equitable and distributive models of governance (decision-making power) in the specialty coffee market by: (1) pursuing new models of governance along the value chain that give producers decision-making power past the farmgate; (2) rebalancing the power of buyers relative to growers/processes in assessments of coffee quality by embedding mechanisms into coffee quality evaluations that resist the hegemony of buyers; (3) reimagining antitrust policies that give those in production an equal amount of legal protection as they afford to consumers to protect smallholders against market power concentration and manipulation; (4) strengthening institutions that represent producer interests in the marketplace to enable them to reach and represent their communities.
- 2:** Enable equitable information sharing (access) in the specialty coffee market by: (1) promoting and supporting new models and tools for trading practices that reflect the supply and demand of different grades of sustainable and quality coffees; (2) supporting a coffee sector where producers have improved bargaining power via better access to market information; (3) developing producer and consumer trust in value chain actors and the services they provide through two-way transparency.
- 3:** Pursue equitable risk distribution in the specialty coffee market by: (1) redistributing the burden/risk of climate shocks across the value chain; (2) supporting the development of price risk management tools and training directed at growers; (3) supporting the diversification of options for farmers in non-viable coffee producing communities.
- 4:** Produce a collective mindset shift within the specialty coffee sector by: (1) expand the view of those interacting with the coffee system from seeing it as a linear supply chain delivering coffee from "seed to cup" to a value network currently (and historically) concentrating wealth and power in the Global North; (2) collectively develop, publish, and amplify an interpretation of "specialty coffee" that includes not only taste quality but sustainability in general terms, including equitable value distribution and fair business practice; (3) support messaging and education around value, including its creation and value sharing.
- 5:** Support equitable distribution of finance and ownership in the specialty coffee market by: (1) establishing new pricing norms based on dignified incomes; (2) promoting share of value obtained by producers as a key differentiator and selling point for specialty coffee; (3) setting new norms around the recognition of value creation at the farm level to ensure that farmers can not only cover the cost of sustainable production, but receive compensation for the un-substitutable service of cultivating the material on which the entire sector depends; (4) encouraging models of business where producers maintain more ownership rights to the coffee they produce at all stages of the value chain to ensure that producers receive rewards commensurate to the rewards of brand owners.

For each recommendation, there are specific goals, barriers to these goals, and strategies to overcome the barriers (Appendix G). The PCR team recognizes that implementing these recommendations will require overcoming numerous challenges, including skepticism from parties currently benefiting from the status quo. Ultimately, these are some of the best options to achieving a specialty coffee sector that distributes value equitably, fosters resilient coffee farming communities that are economically prosperous, and values diverse producers of differentiated coffees.

# Embedding the Work Ahead for the SCA

In order to embed the work of the PCR into the SCA and the sector (in accordance with the initiative's stated goals and process), a subset of the PCR team held a final meeting in Traverse City, MI, US in November of 2019 with the purpose of solidifying the outcomes from the year's work and using them to create an action plan for the SCA.



The team used the full list of recommendations that Three Horizons Workshop produced, the SCA five-year strategic plan, and the vision statement for the PCR Initiative as inputs to develop a three-year roadmap—complete with responsibilities and timelines—that align the PCR's recommendations and priorities with the association's five-year strategic goals. The conclusions and recommendations of the 2019 PCR Initiative are a key enabler and a foundational piece of the SCA's 2025 strategic objective to drive a sustainable specialty coffee agenda, as well as supporting other objectives of expanding the association's global network and creating opportunities for professional development. The following workstreams and priorities emerged as a result of the meeting.

### Workstreams

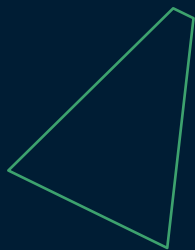
1. **Embedding within the SCA.** Embrace the PCR's work in the association's activities, departments, and leadership.
2. **Knowledge sharing/outreach.** Share final recommendations for the sector with the SCA community, and mine the content and outputs from this year (like the system map) to educate and engage stakeholders on this critical issue.
3. **Take action.** Play a role in recommendations we make to the broader sector by doing what we are best placed to do and contributing to meaningful change.

### Key Priorities

1. **Business model innovation.** Support sector initiatives that have the potential to shift the market to more distributive and regenerative economic models (business models).
2. **Thought leadership.** Embrace the position of thought leadership by generating communications and creating space for conversations that inspire the specialty coffee sector to embrace the sustainable specialty coffee agenda. Tough conversations on the "future of supply chains" are emerging in many sectors as leaders recognize that a business-as-usual mentality will not work in a resource-constrained world pressured by climate change and deep inequality. Specialty coffee has been a leader in sustainability for much of its existence, and to remain relevant the SCA must participate in these conversations.
3. **Global coffee institution strengthening.** Foster productive and mutually beneficial relationships with global coffee institutions to ensure the sustainable specialty coffee agenda reflects the global makeup of our stakeholders, centers producer voices, and supports the strengthening of coffee institutions.
4. **Staff development.** Actively support developing staff and key stakeholders in the SCA's communities to be ambassadors of the sustainable specialty coffee agenda and to incorporate its principles into all the SCA's programs and activities, as well as the association's infrastructure and governance.

# Conclusions

Systems thinking requires looking below surface-level events—examples of which include not only the recent C market rise, but also the drop below \$1.00/lb. that raised the issue to the level of a crisis for a critical mass of specialty coffee stakeholders—in pursuit of the mindset shifts that lie much deeper. It is incumbent upon the “winners” in specialty coffee to examine the conditions that made their success possible and acknowledge that the rewards have been concentrated into too few hands.



In December of 2019, the C market indicator briefly rallied to \$1.25/lb. (for Dec19/Mar20), its highest level since January of 2018, driven—according to analysts—by lower harvest predictions from Brazil and a shortage of washed Arabica.<sup>54,55</sup> Having bestowed the title of “Price Crisis Response” on this initiative, it would be natural to wonder whether the surge, and the weeks of gradual increases that preceded it, signified that the worst was over and the crisis had abated. But while the brief increase in price levels brought much-needed, short-term relief, none of the large-scale, systemic problems this initiative has sought to identify, understand, and ultimately tackle have been solved, because none of the root causes have been addressed. What’s more, many of the root causes remain unacknowledged. Systems thinking requires looking below surface-level events—examples of which include not only the recent C market rise, but also the drop below \$1.00/lb. that raised the issue to the level of a crisis for a critical mass of specialty coffee stakeholders—in pursuit of the mindset shifts that lie much deeper.

During the price crisis of the early 2000s, the coffee sector grappled with similar questions to those that guided this year-long research: What kind of work is needed to solve the problem of low coffee prices? Where should the work begin? Who should lead it? Then, as this year, businesses and organizations led thoughtful conversations about potential interventions, and specialty coffee—which was then a niche market—was posited as a strategy for increasing prices paid to farmers by increasing the quality of their product. Fifteen years after the Executive Director of the Specialty Coffee Association of America attended a two-day summit of international public and private sector actors convened by the National Coffee Association (NCA) to “search for solutions” to the coffee crisis, NCA research suggested that 59% of the cups of coffee consumed in the US qualified as “specialty” coffee.<sup>56,57</sup> Additionally, in the years between 2006 and 2018, the C market rose and fell but never passed below the psychologically significant threshold of \$1.00/lb.<sup>58</sup> Considering those two signals together (and ignoring others), it might have appeared that the specialty coffee intervention succeeded, except that not only did those low prices return, they have returned with greater urgency, fueled in large part by the accelerating pace of climate change and also by growing awareness of the unequal impacts of the industry’s enormous financial gains. In short: specialty coffee’s price premiums were not enough.

Just as climate change increases the vulnerability of smallholder agricultural producers generally, not only producers of coffee, inequality is not a coffee-specific problem. For some coffee producers, it is not a problem now, nor was it a problem when the market hit its lowest levels, nor do they imagine it to ever be a problem: Inequality is both universal and completely case specific. While there is no evidence yet to suggest that specialty coffee is more unequal than the alternative, juxtaposing the growth of prices paid by consumers and the stagnation of prices paid to producers, it’s also impossible to argue that it’s more equal. It is incumbent upon the “winners” in specialty coffee to examine the conditions that made their success possible and acknowledge that the rewards have been concentrated into too few hands.

The consolidation of supply and demand should lead anyone in specialty to wonder whether there will be a future for us and if so, what it will look like. Will there be fewer 90-point coffees? Will entire countries recede from coffee production, as Venezuela did after prioritizing petroleum?<sup>59</sup> Will the economics of the supply chain be as cost-prohibitive for independent retailers as it is for smallholder farmers? But as we look around the industry at the energy and entrepreneurship that remain undaunted, and the calls for equity and inclusion ringing out from coffee professionals across the value chain, it becomes clear that specialty coffee is as meaningful as ever. If it can be reinterpreted for and by a new generation—by age, by geography, by gender—of leaders, it can be more inspiring and vibrant than ever before.

---

<sup>54</sup> “Commodity Futures Price Quotes For Coffee (ICE Futures),” *FuturesTradingCharts.com*, accessed August 12, 2019, <https://futures.tradingcharts.com/futures/quotes/kc.html?cbase=kc>.

<sup>55</sup> Maytaal Angel and Marcelo Teixeira, “Quality Coffee Shortage Trips up Funds to Send Prices Soaring,” *Reuters*, April 5, 2019, <https://www.reuters.com/article/coffee-supplies/quality-coffee-shortage-trips-up-funds-to-send-prices-soaring-idUSL8N28F4I2>.

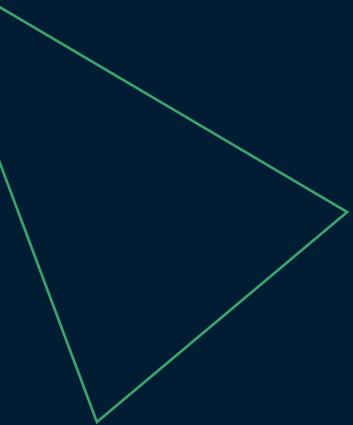
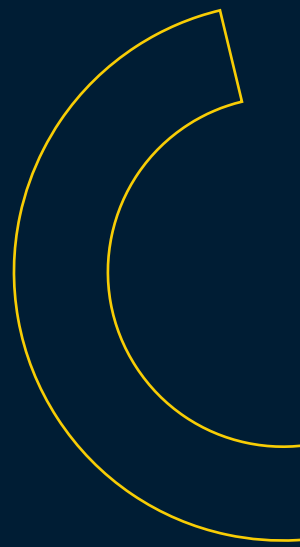
<sup>56</sup> Ray A. Goldberg and James M. Beagle, “2002 Global Coffee Summit: Searching for Solutions,” 2002.

<sup>57</sup> Heather Ward, “2017 U.S. Specialty Coffee Consumption Trends,” *Specialty Coffee Association News*, November 29, 2017, <https://scanews.coffee/2017/11/29/2017-u-s-specialty-coffee-consumption-trends/>.

<sup>58</sup> “Coffee Prices—45 Year Historical Chart,” n.d., <https://www.macrotrends.net/2535/coffee-prices-historical-chart-data>.

<sup>59</sup> Scott Tong, “How Oil-Rich Venezuela Ended up with a Miserable Economy,” *Marketplace*, April 5, 2016, <https://www.marketplace.org/2016/04/05/how-plummeting-global-oil-prices-have-devastated-venezuela/>.

# Appendices



Appendix A: Case Study Summaries	46
Appendix B: "No Regrets" Actions	50
Appendix C: Causal Loop Diagrams	51
Appendix D: Strengths and Weaknesses Analysis	55
Appendix E: Systems Map	57
Appendix E.1: Post-Avance Systems Map Prototype	60
Appendix E.2: Suggested List of Solutions	61
Appendix F: Overview of Relevant Multi-Stakeholder Initiatives	62
Appendix G: PCR Recommendations	65

## Appendix A: Case Study Summaries

### 1. Minimum Pricing for 24 Indian Agricultural Products

**Issue:** Food scarcity and price fluctuations within the agricultural sector of India (started 1965).

**Goal of Intervention:** This initiative is directed towards ensuring reasonable food prices for consumers, stabilizing prices for farmers, and ensuring an adequate supply of food grains for the country.

**Actions of Interest:** A minimum support price is set for each of the crops produced that the Indian government can buy from farmers which gives a more stable price. Generally, the aim for the price is 50% above costs to farmers based on the cost of inputs and labor, including that provided by family members (but doesn't include things like rentals and interest on land). The crops are distributed through a Public Distribution System.

**Actors:** The government of India through several organizations.

**Outcome:** The intervention appears to be considered relatively successful as it has been iterated on since 1965. However, in terms of actual incomes, the National Accounts Statistics indicated that the income per head of the agriculture-dependent population increased by 16% in nominal terms, which was lower than the rate of inflation.

### 2. Implementing a Living Wage in the Banana Sector

**Issue:** The price race between large distributors in developed countries to have low prices for the most preferred fruit worldwide has forced the industry to reduce the price of bananas to levels that are increasingly seen as unsustainable. This is largely due to the fact that while prices are going down at the consumer end of the supply chain, the costs of production, maintenance, and transportation in producing countries have increased significantly. Lowering prices has created economic challenges for millions of families in developing countries that depend on banana trade for their livelihood, as this can prevent adequate social development and reinforce poor working conditions for banana workers.

**Goal of Intervention:** The World Banana Forum's (WBF) "Distribution of Value working group" aims to carry out and support initiatives for the promotion and implementation of living wages as a crucial component of costs of sustainable production. The ultimate aim of these initiatives is to close possible gaps between current salaries and the results for living wages obtained from studies that apply a common methodology.

**Actions of Interest:** WBF aims to establish living wage benchmarks in all banana-exporting countries that can ultimately be used for future wage negotiations and minimum wage-setting interventions in the industry in each country. A self-assessment tool has been developed to enable easier calculation at farm level. Retailers, brands and producers are exploring different strategies to address living wage gap that fit their needs and resources and sharing their learnings with the working groups.

**Actors:** The working group relies on principal stakeholders along the supply chain, including retailers, large corporations, importers, exporters, producer organizations, trade unions, civil society organizations, standards-setting organizations, and research institutions.

**Outcomes:** There is no evidence yet of retailers increasing their prices as a result of the initiatives or taking on a greater share of the living wage cost. The WBF is still gathering data on outcomes.

### 3. The Use of Tea Swaps in East Africa to Reduce Volatility and Transaction Costs

**Issue:** Tea is sold weekly via auction. Both buyers (e.g., brands) and sellers (e.g., factories and grower cooperatives) regularly experience price volatility, and auction prices can also drop below the cost of production. Unstable or low prices are passed on to smallholders, who supply factories and cooperatives and typically receive part-payment upfront and rely on a variable and less frequent "bonus" for the rest. This can lead smallholders to lose money and/or need to take out costly short-term loans in order to meet the needs of their family or business, especially if the upfront payment doesn't cover their cost of production.

**Goal of Intervention:** To pilot a market mechanism, Tea Swaps, to reduce market volatility and the cost of doing business for auction buyers and sellers. The ultimate aim of this initiative is to enable sellers (such as factories and cooperatives) to pay larger upfront prices to their smallholder suppliers, covering smallholders' cost of production as a minimum and reducing their burden of risk in the value chain.

**Actions of Interest:** Tea Swaps are a financial mechanism that allows tea buyers and sellers to agree a fixed price for a fixed term. Swaps sit alongside, but separate to, the tea auction and smooth the volatility of the auction prices. However, as the tea auction fluctuates, buyers and sellers of Swaps receive or pay the difference between the auction price and the agreed fixed price of the Swap. A Swap broker redistributes this money between the buyer and seller to maintain the fixed price. This creates greater price certainty for buyers, sellers, and ultimately the smallholders that supply them.

**Actors:** Project Team: Tea 2030, Business Innovation Fund; UK Department for International Development (BIF: DFID), TeaSwap Ltd.; Project Reference Group: Tata Global Beverages, Unilever, Camellia, Kenya Tea Development Agency (KTDA).

**Outcome:** The impacts of this initiative will be assessed at or towards the end of the real Swaps trial in September–October.

#### 4. Closing the Living Wage Gap in the Malawi Tea Sector

**Issue:** The tea industry is the largest formal sector employer in Malawi, employing 50,000 workers and providing livelihoods to more than 14,000 smallholders. Tea estate jobs are considered good jobs in Malawi, paying above the agricultural minimum wage of Malawi and providing a range of other benefits. However, in global terms, wages are very low, below the World Bank extreme poverty line for an average household with an average number of earners. Research concluded that wages and in-kind benefits would need to double to achieve a living wage.

**Goal of Intervention:** To achieve a competitive, profitable tea industry that can provide its workers with living wages, living incomes, and improved nutrition by 2020.

**Actions of Interest:** One element of this objective is to design a mechanism that enables the additional cost of a living wage in the Malawi tea industry to be shared fairly and sustainably across stakeholders, and which can win the support of all stakeholders. This uses the living wage benchmark from the 2014 Anker report, to frame the sustainable procurement discussions between buyers and plantations. Another aspect was changing the wage-setting process, so workers' and employers' organizations engage in a meaningful process of collective bargaining.

**Actors:** Ethical Tea Partnership, Oxfam, IDH, GIZ, tea producers from the Tea Association of Malawi, main buyers, traders, packers, retailers, certification schemes (and the Partnership is endorsed by the government of Malawi).

**Outcome:** It is highly unlikely that the estimated "living wage" will be achieved across the entire workforce by 2020. While this is disappointing, tea industry cash wages have once again risen above the rate of rural inflation (previously these had been linked together) and are now significantly higher than the Malawi Government notified minimum wage.

The collective bargaining agreement (CBA) led to an across-the-board wage increase of 11.29% for all members of the bargaining unit for 2018/19, plus a further 5% increase for 2019/20 with the inflation rate estimated at 8.7%, and the rural inflation rate at 7% whereas the food inflation is slightly higher at 9.5%. This falls short of living wage, but the CBA process was stronger than previously with increased union membership and intense capacity building program for both PAWU and TAML leadership, aimed at ensuring the development of mature systems for industrial relations that help improve wage setting and worker representation.

Buyers weren't prepared to get behind the sustainable procurement model which advocated guided minimum pricing that could facilitate the payment of a living wage over a period of 3 years—while it was considered affordable in year 1, the compound impact of above-inflationary price rises would send future pricing too high to remain sustainable for buyers to purchase Malawi teas in commercial quantities.

Producers also weren't happy to accept minimum pricing due to concerns over high costs of production and loss of competitiveness for the Malawian tea industry.

A counter proposal from TAML is now being considered, to set up an industry-wide fund through which discretionary "living wage" paid by tea buyers would flow through producers to the entire workforce covered by the industry collective bargaining agreement. Initial estimates indicate that, with modest levels of "living wage" allowance per kilogram of tea, such a fund could finance an additional month's wages per annum for the entire workforce.

## 5. Setting Minimum Prices and Premiums for Fairtrade Coffee

**Issue:** The systemic disparity of economic resource allocation that is inherent in conventional commodity trading platforms, leaving producers at the lowest end of the scale while also shouldering the majority of the financial risk.

**Goal of intervention:** Fairtrade's vision is a world in which all small producers and workers can enjoy secure and sustainable livelihoods, fulfil their potential, and decide on their future. This is predicated on the belief that by creating a strong economic trading link between producers and consumers, an alternative, sustainable method of trade becomes possible.

**Actions of Interest:** The minimum price paid to Fairtrade producers is determined by the Fairtrade Standards and Pricing Unit and for washed Arabica coffee it is \$1.40/lb. (set in 2011). This price aims to ensure that producers can cover their average costs of sustainable production. It acts as a safety net for farmers at times when world markets fall below a sustainable level. When the market price is higher than the Fairtrade Minimum Price, the buyer must pay the higher price. Producers and traders can also negotiate higher prices on the basis of quality and other attributes.

In addition to the price paid for the product, there is an additional sum of money, called the Fairtrade Premium (\$0.20/lb. for coffee), that farmers receive for products sold on Fairtrade terms. This money goes into a communal fund for workers and farmers to use to improve their social, economic, and environmental conditions. The use of this additional income is decided upon democratically by producers within the farmers' organization, or by a workers' committee on a plantation. The Premium is invested in education and healthcare, farm improvements to increase yield and quality, or processing facilities to increase income.

**Actors:** Fairtrade International (50% owned by producers, meaning that they are represented in all decisions regarding governance, standards and certification), ISEAL, International Labour Organization.

**Outcome:** Analysis suggests that Fairtrade helps to cover the minimum annual cost; it doesn't look at dignified livelihoods, productivity, or contribution to household income. Even if everything is operating at maximum efficiency, we know it is not enough for people to meet a living income.

There are claims that when you take into account the coffee that is produced but can't be sold as certified, the expected producer benefits in the Fairtrade model are close to zero. (based on data on coffee cooperatives in Central America).



## 6. Minimum Pricing in the Ghanaian Cocoa Sector

**Issue:** The Ghanaian cocoa sector was suffering from market sharing, price fixing, and unstable domestic prices. Price volatility is a common challenge facing smallholder farmers in tropical commodities. Recent developments in cocoa and vanilla—such as a 40% drop in the price of cocoa in West Africa and the boom–bust cycle with current high vanilla prices—have highlighted how price volatility and extended periods of low prices can undermine the gains of supply chain programs and create significant barriers to invest in productivity, quality, and sustainability for farmers or even reach a living income.

**Goal of Intervention:** To create a national organization to: strengthen coordination and advocacy for a sustainable cocoa industry, identify potential bottlenecks, and develop plans for improvement in areas such as policy frameworks for sustainable cocoa, land use planning, up-scaling, and replication of successful experiences, and contribute to the global knowledge on national commodity platforms from the lessons learned.

**Actions of Interest:** Following reforms to the COCOBOD, the government committed to passing on a significant share of export prices to farmers and later decided to also make tax reduction commitments. Producer prices are based on the recommendations of a technical committee. Farmers receive a guaranteed stable price for their cocoa throughout a season.

**Actors:** Licensed buying companies and haulers and chaired by the Ministry of Finance and Economic Planning. The technical committee also includes representatives from the University of Ghana and the Bank of Ghana.

**Outcome:** The buyers have become competitive not on price, but in competing for market share. This was not intended but has achieved some stability. The state has also benefited from the improved stability. The introduction of partial liberalization appears to have negatively affected quality though Ghana has a reputation for quality cocoa through centralized marketing and quality control. The program continues to rely on foreign investment.

## Appendix B: "No Regrets" Actions

### Action 1: Raise Awareness

**Goal:** To identify and launch galvanizing messaging that begins to raise awareness about the price crisis within the SCA community. This is not a consumer-focused campaign; it is an awareness campaign to the SCA community.

**Purpose:** So much of the work we are doing requires that it is built on a solid foundation of our community *knowing* what we are doing, why we are doing it, and supporting the work. Building buy-in in the long run for behavior change will require knowing about the PCR work. Further, this work will provide a foundation for all other communications.

### Action 2: Add Voice to Humanitarian Support

**Goal:** To identify one to three humanitarian organizations that are going to drive "emergency" relief for farmers that are facing immediate hardships due to the pricing drop over the last six to nine months while messaging that humanitarian support is not enough and that the industry needs to take responsibility for its own value chains.

**Purpose:** Support tackling the "crisis" part of this situation (not forgetting the very real, material impacts to this crisis on families) while facing into the long-term systemic challenges.

### Action 3: Amplify Living Income

**Goal:** To amplify the work going on in parallel platforms on living income and explore if living-income work could be a solution for specialty coffee addressing the price crisis.

**Purpose:** Give voice to work going on with living income (something people can explore *now*) while getting familiar with this work as a possible long-term "rallying point" for the SCA PCR.

### Action 4: Provide Inspiration

**Goal:** To provide models for what can be done immediately by the industry to act, using already identified options from Re:co Symposium (for ease and efficiency).

**Purpose:** To see what models have the most traction in the industry for possible scale while simultaneously inspiring companies to "reimagine" traditional business models.

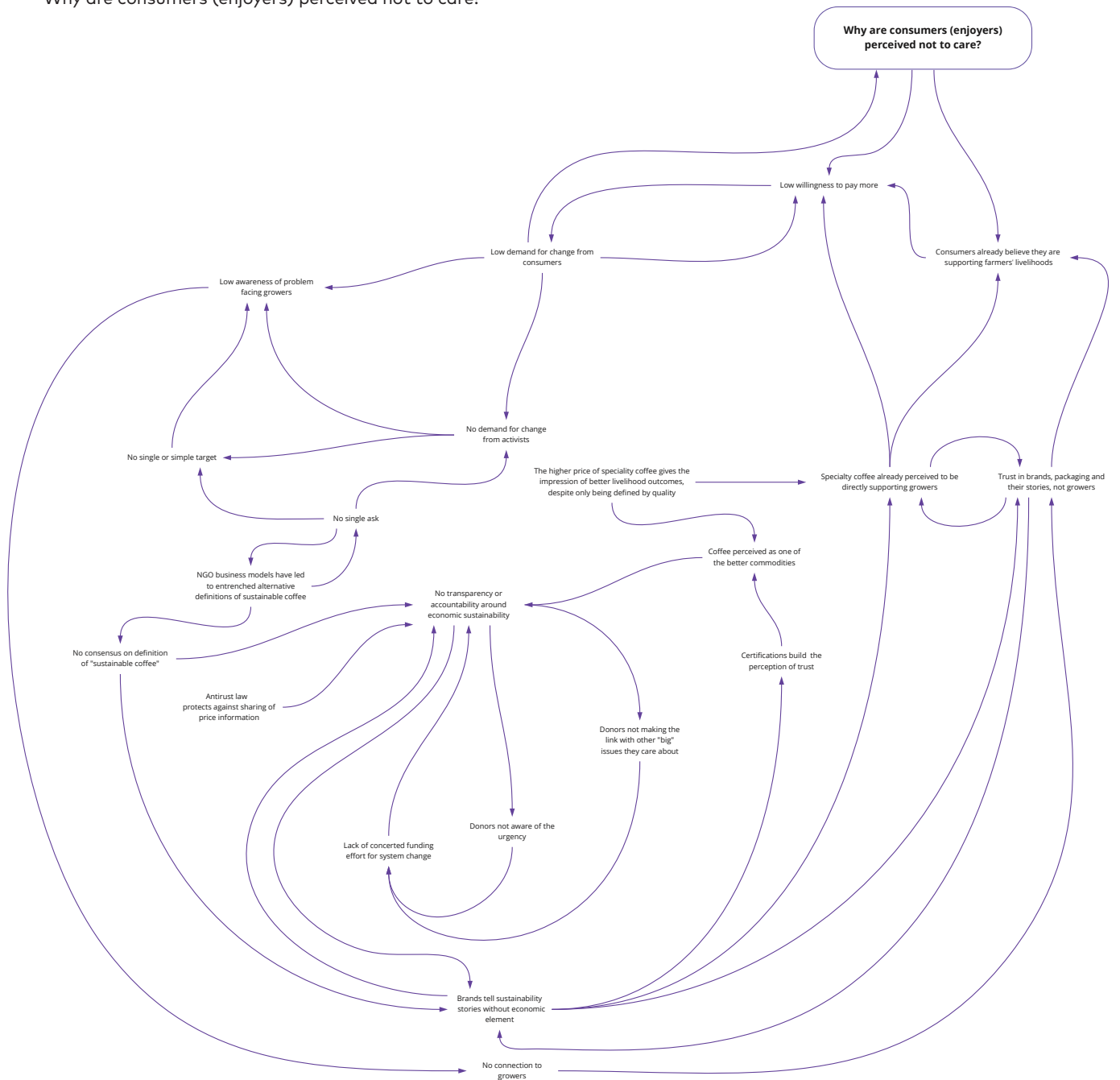
### Action 5: SCA Position on Competition Law

**Goal:** At a minimum, provide the industry with education on how to have responsible conversations on this topic (avoiding the topic is not an option) and perhaps even explore if/how to challenge competition law.

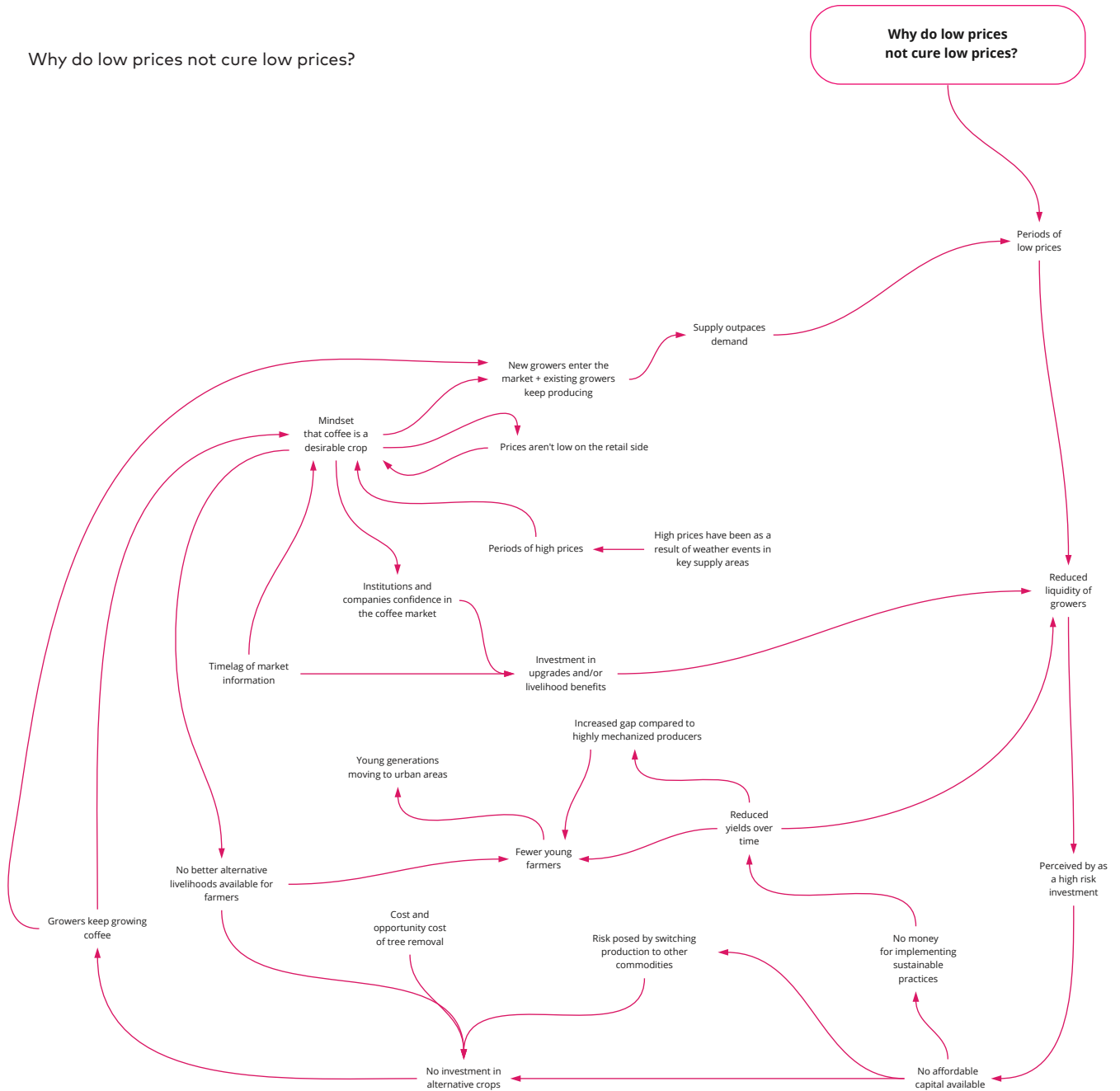
**Purpose:** To overcome the perceived "roadblock" of anti-trust law of addressing this issue in our industry.

### Appendix C: Causal Loop Diagrams

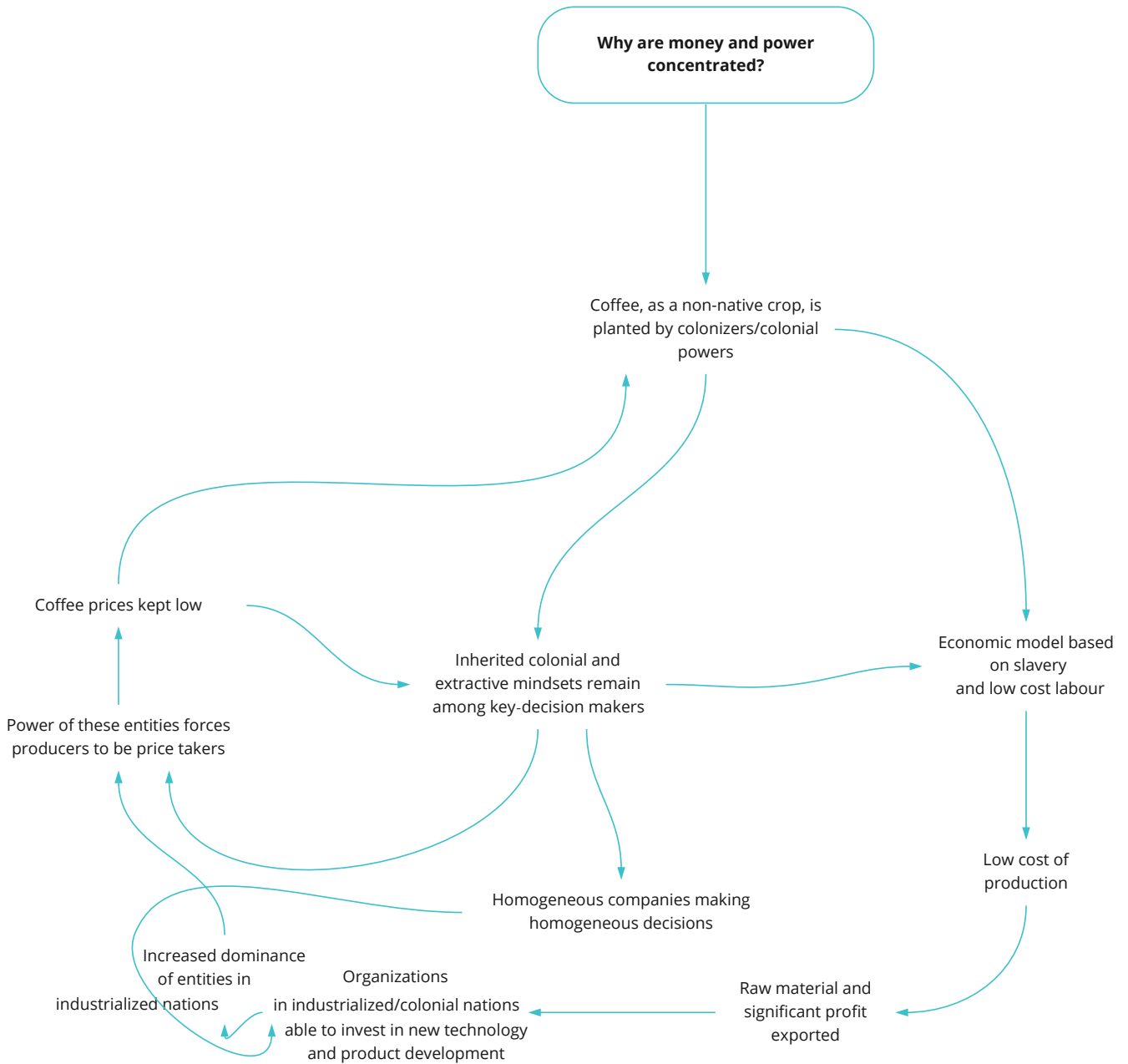
Why are consumers (enjoyers) perceived not to care?



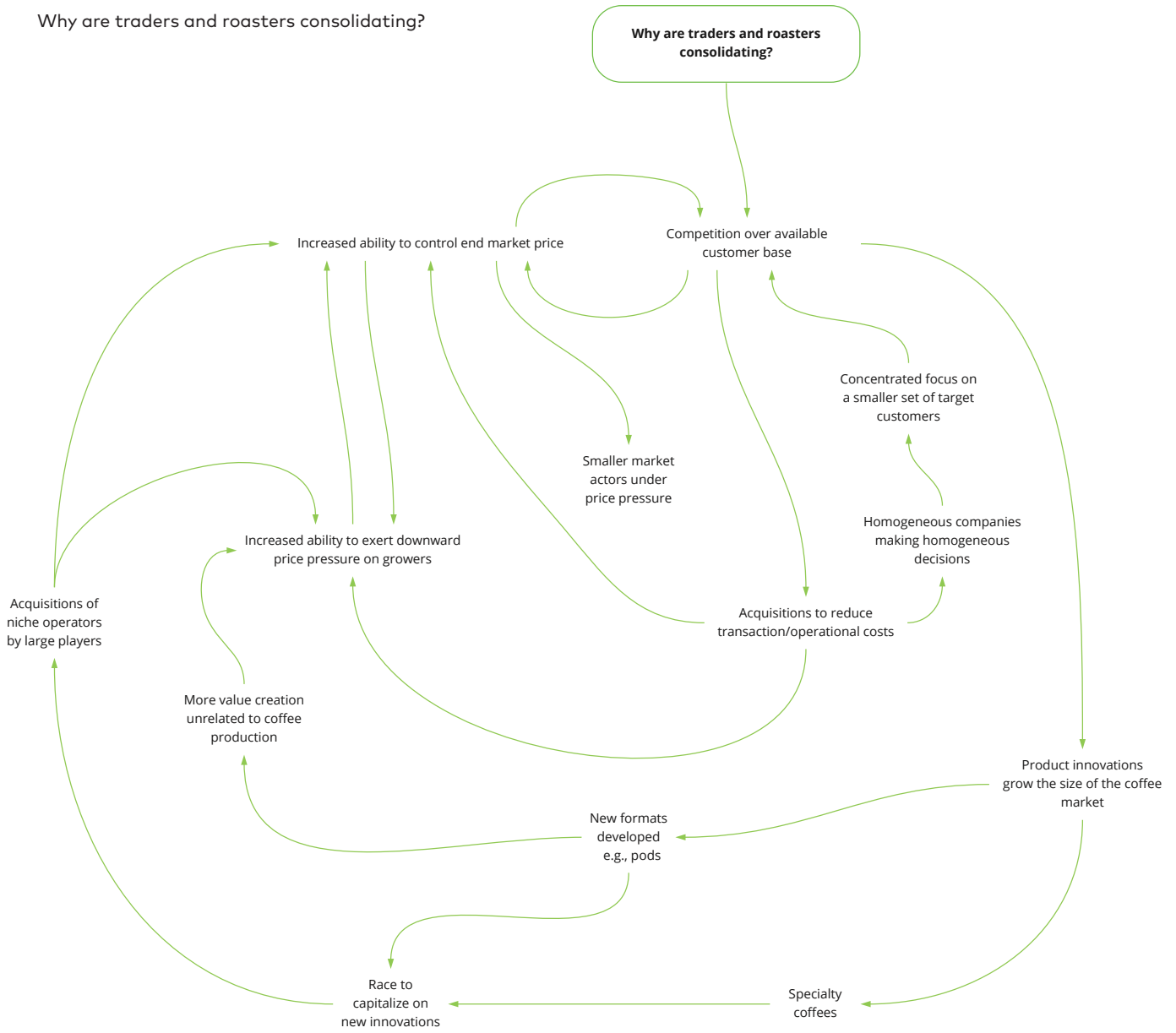
Why do low prices not cure low prices?



Why are money and power concentrated?



Why are traders and roasters consolidating?



**Appendix D: Strengths and Weaknesses Analysis**

Strengths	Weaknesses
<b>Quality</b>	
The SCA scoring system, i.e., common language for taste quality	Farmers do not know the product quality as determined by roasters/traders
<b>Consumers</b>	
Provides a unique consumer experience	Consumers are not so aware of product quality as determined by roasters/traders
Baristas offer direct connection and conversation with the end consumers	
<b>Differentiated</b>	
Differentiated and branded sector	"Special" can only be understood in relation to its contrast (i.e., conventional)
Have the word "specialty" to leverage	Specialty is often confused for sustainable
Diversity of flavors and opportunity to tap into new coffee opportunities (from production to preparation)	Lack of a shared understanding of specialty (is it 80+ coffee, is it premium price, etc.)
<b>Values</b>	
Interest in origin/source/diversity	Good intentions, too few with impact—trading models are too low value for producers
Values driven (aspirational, idealism), not value driven (bottom line only)	Lack of accurate data about production, farmers, etc.
	No code of ethics
	No enforcement
<b>De-commoditization</b>	
Driving de-commoditized segment	It's still too closely related to the C market
Influence to change mainstream market	Reliant on the infrastructure of the commodity market (but don't often recognize that)
	Free market ideals

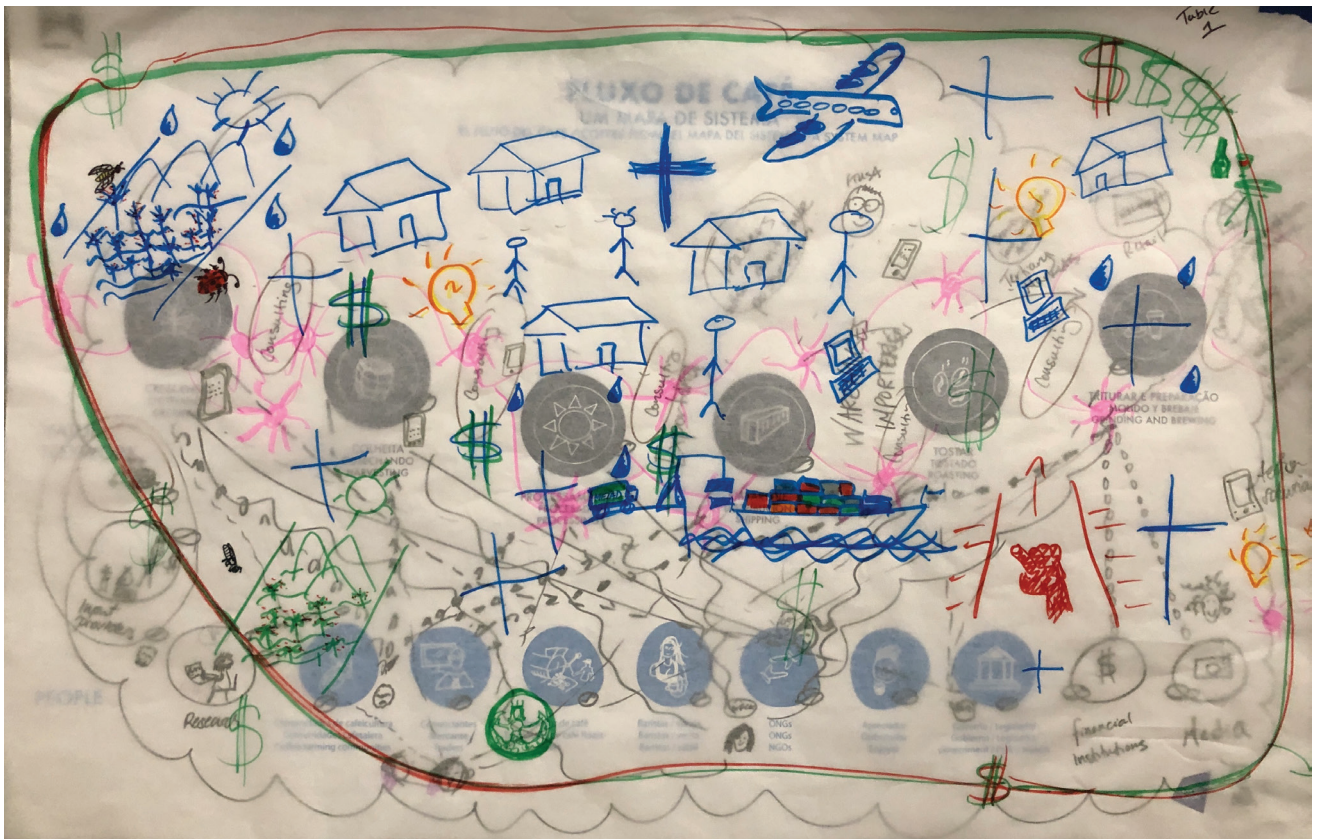
Strengths	Weaknesses
<b>Innovation</b>	
Innovation driven	It's a bubble and niche
Wealthy industry	Consolidated
Energy, enthusiasm, and entrepreneurship	
<b>Community</b>	
Sense of community and belonging	Insular
Has the SCA as a forum with broad stakeholder participation	Elitist



## Appendix E: Systems Map



**Seed to Cup:** A representative of the traditional seed-to-cup value chain representation.



A more accurate (and far more complex) representation of the coffee value stream from one of the tables during the system mapping exercise.

### Further Insights from Table Discussions

- ▶ Externalities should be included in the price of coffee—the process is part of the final product.
- ▶ Aid interventions aren't solutions.
- ▶ Power and information are consolidated at the trader and roaster levels. Producers have no power and consumers aren't aware of their power.
- ▶ Specialty actors need to recognize that they depend on the infrastructure of the commodity market.
- ▶ Actions to structurally change and shorten the chain seem like an important principle.
- ▶ Those that benefit from the system are the system owners.
- ▶ Property rights are key to the shift along the chain.
- ▶ Risk and investment are very closely related.
- ▶ We need to build a system of trust and expertise across the value chain. Currently, knowledge is siloed in different parts of the chain, but with technology, distribution is more possible than ever.
- ▶ We have a value chain where power and money are consolidated in the center.
- ▶ This is an outdated market system—C market does not reflect today's reality.
- ▶ The traditional seed-to-cup map was designed to tell a marketing story.
- ▶ There is power in the information, and that power is not being taken advantage of or being valued.
- ▶ Transparency is not reciprocal—we expect it of producers, but not from other actors in the chain.
- ▶ Global activity in coffee is profitable—there is not a lack of money in the system; the issue is its distribution.
- ▶ The traditional seed-to-cup diagram obscures and distorts power dynamics—some roles appear more powerful than they are, some less—intentionally.
- ▶ Lack of communication and information flow creates confusion and distrust on both "ends" of the value chain.
- ▶ There is potential power with producers: we have the raw material and we own production, but we aren't using it.
- ▶ At present big companies and industry have the most power.
- ▶ Power is imbalanced in the system map. Power is concentrated in traders, roasters, financial institutions, which in turn influence government and policy (further concentrating power).
- ▶ It is an unfair system with more pressure placed on one extreme of the chain, but the return does not equate to risk—those with the most risk (the farmer) also have the least return.
- ▶ Lack of transparency within the system fuels injustice.
- ▶ Consumers need more information about how sustainable the coffee is (or isn't) to connect to the producer.
- ▶ Consumers need more information about how much of the money they pay for their coffee actually goes to producers.
- ▶ The traditional seed-to-cup model is too linear. Connecting and engaging all links of the chain is very important.
- ▶ Who's missing from the map: Financial institutions, research entities, inputs, certifiers, stock exchange, institutions (national and regional).
- ▶ The map is intentionally simplified. The consequence of the current representation of the seed-to-cup journey is that you lose the ability to see opportunities for improvement. There is no complete information on all the factors that impact the situation.
- ▶ Roasters, banks, traders, retailers, have most of the information and power.
- ▶ Wealth, information, and decision-making power in the supply chain are imbalanced.
- ▶ The objective of this representation is to market coffee in the most profitable way! Those who sell coffee benefit!

Appendix E.1: Post-Avance Systems Map Prototype



## Appendix E.2: Suggested List of Solutions

- ▶ Global coffee fund (as proposed in the Sachs' report *Achieving Sustainable Development in the Coffee Sector*)
- ▶ An informed consumer who is willing to pay more
- ▶ Transparency across the supply chain
- ▶ New price discovery mechanisms, e.g., Transaction Guide
- ▶ Verification of a benchmark that enables viable livelihoods / covers cost of production / relates to the final sale price / etc.
- ▶ Price premium that enables a living income
- ▶ A label that guarantees US\$2/lb. to farmers
- ▶ Affordable, accessible, mass mechanized harvesting
- ▶ Driving higher on-farm productivity
- ▶ Long-term fixed contracts
- ▶ More direct producer-buyer trading relationships
- ▶ Investigate power shifts in coffee quality evaluation (cupping)
- ▶ Roasting coffee closer to the point of production
- ▶ Movement to drive a mindset shift for all actors in the sector towards equitable and shared prosperity
- ▶ Redefining specialty coffee to include sustainability
- ▶ Price risk management tools for producers
- ▶ Technology-driven traceability (e.g., blockchain)
- ▶ Reimagining antitrust law to go beyond supporting just consumers
- ▶ Support for producers in non-viable coffee regions to transition out of coffee

**Appendix F: Overview of Relevant Multi-Stakeholder Initiatives**

Entity	Initiatives	SCA Engagement
Global Coffee Platform (GCP)	The GCP secretariat and board issued a Call to Action to the industry, launched on June 6, with four focus areas: minimize speculation, leverage national sustainability platforms, mobilize donor agencies and governments, and report on sustainable sourcing volumes. A webinar was hosted on June 26, 2019.	Regular (at least four per year) alignment meetings with GCP staff and board members; SCA participation in GCP Call to Action events; participation by GCP staff in Campinas convening.
IDH Sustainable Trade Initiative	<p>IDH convened the TCLI—a group of roasters, traders, and Colombian producer organizations—with the goal of quantifying the living income gap for coffee producers in Colombia. The study considered costs across multiple regions, varying conditions for production, and the different market segments (“sourcing archetypes”) to which producers sell coffee.</p> <p>Upon the publication of its final report in December of 2019, IDH sought opportunities to partner with coffee industry actors to close the gap in the archetypes where it is possible to do so, and to support the development and pursuit of alternative strategies where the gap cannot be closed through technical and price support alone.</p>	IDH participation in Brooklyn and Washington, DC convenings; SCA participation in the Taskforce on Coffee Living Income (TCLI).
Lutheran World Relief (LWR) / Heifer International	The coffee price crisis prompted LWR and Heifer to question to what extent their programs in coffee-producing countries are truly making a positive difference for farmers and how they might enable the coffee companies funding project work to remain comfortably in their positions of power. They cohosted a workshop in March of 2019 called, “Farmers First: A New Coffeenomics” where participants (including the SCA) identified potential intervention areas for the two organizations, among them consumer action (Heifer) and a true price model valuing ecosystem services (LWR).	LWR participation in Brooklyn convening; SCA participation in LWR/Heifer workshop; monthly alignment calls between LWR/Heifer/SCA; LWR/Heifer support for PCR engagement in humanitarian efforts.
Conservation International (CI) / Sustainable Coffee Challenge (the Challenge)	On behalf of the Challenge, CI made the strategic decision to support other price crisis response initiatives led by the ICO, SCA, and GCP—all of which have representatives on its Advisory Council—instead of launching another under its name. In addition to participating in convenings held by the ICO and SCA and dedicating a staff member (Niels Haak) to the PCR core team, the Challenge has also promoted work being undertaken by other initiatives through its collective action networks on labor, sustainable sourcing, renovation and rehabilitation, and coffee and forest mapping.	CI dedication of staff to PCR; CI participation in Brooklyn and Washington, DC convenings; SCA participation in Challenge Advisory Council; SCA amplification of Challenge initiatives and messages.

Entity	Initiatives	SCA Engagement
International Coffee Organization (ICO)	<p>In September of 2018, the ICO was mandated by its members to dedicate a portion of its resources to addressing the coffee price crisis in Resolution 465. Activities in support of the resolution included: convening four sector-wide dialogue events that led up to a CEO Forum; conducting research on production costs and the impact of speculation on the market; and publishing a roadmap for the industry in the London Declaration, which was put forward after consultation with leading industry firms and multi-stakeholder initiatives and adopted by the members in September 2019.</p>	<p>ICO participation in Campinas convening; SCA participation in sector-wide convenings in Nairobi, Brussels and London; SCA signatory to "London Declaration on price levels, price volatility and the long-term sustainability of the coffee sector."</p>
Specialty Coffee Transparency Guide (SCTG)	<p>The SCTG aggregates and publishes pricing data from thousands of coffee contracts it has received from 38 data donors (roasters, exporters, and importers). The aggregated, anonymized data is organized for presentation by quality level, lot size, and region of provenance with the intent to provide alternative, and more accurate, benchmarks for coffee prices than the C market.</p> <p>Since publishing its first report in December 2018, the SCTG, which is housed in Emory University's Goizueta Business School, has recruited more data donors and issued a revised report, and now is searching for a source of long-term funding that will enable it to sustain itself.</p>	<p>SCTG participation in Berlin and Campinas convenings; SCA funding of US\$25,000 to launch SCTG; SCA dedication of webinar and Re:co platform to raising awareness; SCA participation in Transparency Colloquium; SCA event support in event planning.</p>
World Coffee Producers Forum (WCPF)	<p>After its first event in 2017, the WCPF commissioned Dr. Jeffrey Sachs of the Columbia University Center on Sustainable Investment to conduct a study on the economic sustainability of the coffee industry. Preliminary conclusions from his team's report, <i>Achieving Economic Sustainability in the Coffee Sector</i>, were the centerpiece of the WCPF's second event in July 2019 and the final version was published in October 2019.</p> <p>The report outlines multiple interventions, but the central one is the creation of a global fund for coffee sustainability that would independently administer funds to projects identified as priorities by national sustainability plans in coffee producing countries.</p>	<p>WCPF participation in Campinas; SCA participation in the WCPF conference; SCA dedication of Re:co platform to raising awareness; SCA ongoing participation as an advisor; SCA interviews for "Ensuring Economic Viability and Sustainability of Coffee Production" report.</p>
United States Agency for International Development (USAID)	<p>In February 2019, the Feed the Future (FtF) initiative of USAID commissioned a report by global consultancy Dalberg on obstacles to and strategies for improving price risk management (PRM) for coffee producers, particularly in Guatemala and Honduras. The report was published in April and shared at Re:co in Boston.</p> <p>In September, the agency issued a call for proposals on innovative ways to address PRM and received proposals from multiple SCA community members. Announcements of the awards have yet to be made public.</p>	<p>USAID participation in PCR convenings; SCA and FtF joint MoU to support coffee farmers to manage coffee price volatility; SCA dedication of Re:co platform to share PRM strategies report; SCA promotion of FtF call for proposals issued in September 2019.</p>

**PCR Initiative Summary of Work**

Appendix F: Overview of Relevant Multi-Stakeholder Initiatives

Entity	Initiatives	SCA Engagement
Promecafe	<p>Promecafe has provided data and context for how the crisis is being experienced by its members (institutions from Guatemala, El Salvador, Nicaragua, Honduras, Costa Rica, Panama, Peru, Mexico, the Dominican Republic, and Jamaica) to initiatives including the PCR and represented these countries in the WCPF and ICO. The organization is also supporting the implementation of ICO Resolution 465 by leading efforts related to increasing domestic consumption among its members.</p>	<p>Promecafe staff participation in SCA events including Avance and Re:co (as a panelist); SCA participation in the Simposio Latinoamericano de Caficultura in Guatemala.</p>
Living Income Community of Practice (LICP)	<p>The LICP is a joint project of the Sustainable Food Lab (SFL), GIZ, and the ISEAL Alliance, the goal of which is to “support activities focused on improving smallholder incomes towards living income.”</p> <p>By hosting workshops and webinars, developing measurement tools, and facilitating connections, the LICP aims to increase understanding of living income measurement and the income gap, and to identify and discuss strategies for closing the income gap.</p>	<p>SFL participation in PCR convening in Brooklyn; SCA participation in LICP webinar (panelist); SCA participation in LICP conference in Rotterdam.</p>



## Appendix G: PCR Recommendations

To realize its vision of **a specialty coffee sector that distributes value equitably, fosters resilient coffee farming communities that are economically prosperous, and values diverse producers of differentiated coffees**, the Price Crisis Response Initiative recommends specialty coffee stakeholders pursue the following goals and strategies:

Governance / Decision-Making Power		
Barrier	Strategy	Goal
Producers have no voice or decision-making power related to their coffee past the farmgate.	Promote the adoption of new governance models for specialty coffee organizations (businesses, NGOs, etc.).	New model for governance along the value chain and mindset about who gets to make decisions.
The quality assessment tools used by specialty coffee buyers—which determine a given coffee’s value—are little understood by producers and difficult to challenge.	Embed mechanisms into coffee quality evaluation that resist the hegemony of buyers.	Rebalance of the power of buyers relative to growers/processors in assessments of coffee quality; more equalized negotiating power.
Competition law protection focuses on outcomes for consumers and not for producers, whose interests and livelihoods do not always align with short-term consumer benefit.	Protect smallholders against market power concentration and manipulation.	Reimagined antitrust policies that give those in production an equal amount of legal protection as they afford to consumers.
Farmers are often disaggregated and lacking institutions that can organize and advocate on their behalf.	Support the strengthening of producer institutions and producer-led initiatives (including across sectors and commodities) to enable them to reach and represent their communities, and to achieve their missions.	Strong institutions representing producer interests in the marketplace.

Information Access/Sharing		
Barrier	Strategy	Goal
Specialty coffee prices often set on a differential to the C market; a premium over a low price may still be a low price.	De-commoditize specialty coffee, recognizing that each specialty coffee has its own unique value.	New models and tools for trading practices, e.g., price benchmarks that reflect the supply and demand of different grades of sustainable and quality coffees, rather than the overall supply of and demand for commodity-grade coffee.
Poor access to, and time lag of, market information for growers result in producers being price-takers.	Producer-led price discovery, via better access to market information.	Producers have improved bargaining power.
Information flows along the value stream from producers to consumers, but not in the opposite direction.	Promote two-way transparency (producer consumer).	Producers and consumers develop trust in value chain actors and the services they provide.

Risk		
Barrier	Strategy	Goal
Producers bear the risk and cost of climate shocks on behalf of the entire sector.	Internalize climate risk into the value chain.	Risk burden shared across the value chain.
Lack of risk management options for smaller growers and processors; the futures market dynamics are divorced from the coffee production dynamics on the ground.	Price risk management tools and training directed at growers currently not served by the futures market.	Producers are able to manage market volatility.
Existing growers keep producing coffee despite low prices due to a lack of viable alternative livelihoods.	Support diversification options for farmers in non-viable coffee producing communities.	Coffee producers farm by choice, not by default.

Mindset Shift		
Barrier	Strategy	Goal
Lack of awareness of (or willingness to recognize complicity in) inherited colonial and extractive mindsets that underpin decision-making in the sector.	Expand the view of those interacting with the coffee system from seeing it as a linear supply chain delivering coffee from “seed to cup” to a value network currently (and historically) concentrating wealth and power in the Global North.	Specialty coffee recognized among agricultural sectors for leadership in moving into a post-commodity world.
Specialty coffee perceived by roasters, retailers, and consumers/ the public as already directly supporting producers though higher prices.	Collectively develop, publish, and amplify an interpretation of “specialty coffee” that includes not only taste quality but sustainability in general terms and specifically, the equitable distribution of value and fair business practices.	Specialty coffee businesses are driven by their commitments to sustainability.
Core beliefs about business and value chains undermine moves in the direction of a more equitable sector.	Support messaging and education around the following key elements: (1) Growing coffee entails significant value creation, (2) Land and its natural capital are valuable, (3) Paying well is not enough—this is about value sharing and “taking less, not giving more,” (4) Information has a value and should be proprietary to the owner, (5) Farming is a valuable livelihood that is just as valuable as other professions.	Specialty coffee is a thriving, equitable, and sustainable activity for the entire value chain.

<b>Distribution of Finance and Ownership</b>		
<b>Barrier</b>	<b>Strategy</b>	<b>Goal</b>
The true cost of sustainable production of coffee is not yet understood or built into pricing.	Establish new pricing norms based on dignified incomes.	Specialty coffee prices reflect the cost of sustainable production—including the time of the farmer and their family as well as other sources of income—and helps to support the producer’s entire business, rather than just the high-quality production.
Inconsistency and opacity in the relationship between the price paid to the producer and the price paid by the consumer.	Explore new pricing norms based on growers receiving a fair share of coffee’s total value.	The value captured by producers is a key differentiator and selling point for specialty coffee.
Not all the value (or potential value) generated by coffee production is captured in the price paid to farmers.	Set new norms (mindset shift) around the recognition of value creation at the farm level.	Farmers can not only cover the cost of sustainable production, but receive compensation for the un-substitutable service of cultivating the material on which the entire sector depends.
Most of the (perceived) value in the value chain is generated through off-farm activities.	Producers retain more ownership rights to the coffee they produce at all stages of the value chain (until the final sale).	Producers receive rewards commensurate to the rewards of brand owners.

## Bibliography

"2019 Coffee Historical Prices / Charts (ICE Futures)." 2019.

Angel, Maytaal, and Marcelo Teixeira. "Quality Coffee Shortage Trips up Funds to Send Prices Soaring." Reuters, April 5, 2019. <https://www.reuters.com/article/quality-coffee-shortage-trips-up-funds-to-send-prices-soaring-idUSL8N28F4I2>.

Basic. "Coffee: The Hidden Crisis Behind the Success Story." 2019. [www.lebasic.com/en](http://www.lebasic.com/en).

Beck, Ulrik, Saurabh Singhal, and Finn Tarp. "Coffee Price Volatility and Intra-Household Labour Supply." No. UNU-WIDER Research Paper Wp2016-0016, 2016.

Ben-Ami, Aner. "Goldilocks and the Three Term Sheets: Finding Just the Right Amount of Investor Power in Mission-First Businesses." Medium, 2018.

Browning, David. "Using Technology to Help Smallholder Farmers." 2019. <https://www.youtube.com/watch?v=OXY9R1MqT9Y>.

Brunn, E M. "The New York Coffee and Sugar Exchange." *The Annals of the American Academy of Political and Social Science* 155, no. 1 (1931): 110–18.

Burton, Jonathan. "Workers would get money and voting power under this radical profit-sharing idea." Market Watch, September 21, 2019. <https://www.marketwatch.com/story/forcing-companies-to-share-the-wealth-with-employees-could-save-capitalism-2019-09-13>.

Buzby, Jean C., and Stephen Haley. "Coffee Consumption over the Last Decade." n.d.

Caswell, Martha, V. Ernesto Méndez, and Christopher M. Bacon. "Food Security and Smallholder Coffee Production: Current Issues and Future Directions." 2012.

Christopher L. Gilbert. "Value Chain Analysis and Market Power in Commodity Processing with Application to the Cocoa and Coffee Sectors." *Commodity Market Review*, 2008.

"Coffee Prices—45 Year Historical Chart." n.d. <https://www.macrotrends.net/2535/coffee-prices-historical-chart-data>.

"Commodity Futures Price Quotes For Coffee (ICE Futures)." FuturesTradingCharts.com. Accessed August 12, 2019. <https://futures.tradingcharts.com/futures/quotes/kc.html?cbase=kc>.

Council, International Coffee. *Profitability of Coffee Farming in Selected Latin American Countries—Interim Report* ICC 124–6, no. May (2019).

Daviron, Benoit, and Stefano Ponte. *The Coffee Paradox: Global Markets, Commodity Trade and the Elusive Promise of Development*. Zed Books, 2005.

Foster-Fishman, P. G. "How to Create Systems Change." Lansing, MI: Michigan Developmental Disabilities Council, 2002.

Foster-Fishman, Pennie G. Branda Nowell, and Huilan Yang. "Putting the System Back into Systems Change: A Framework for Understanding and Changing Organizational and Community Systems." *American Journal of Community Psychology* 39, no. 3–4 (2007): 197–215.

Frances O'Grady, Sam Bowman. "Should Companies Be Forced to Put Workers on Boards?" *The Guardian*, August 29, 2017. <https://www.theguardian.com/commentisfree/2017/aug/29/companies-workers-boards-theresa-may-u-turn>.

Goldberg, Ray A. and James M. Beagle. "2002 Global Coffee Summit: Searching for Solutions." 2002.

"How To Deliver A Better Beverage." 2019.

International Coffee Organization. "Country Coffee Profile Vietnam." ICC 124–9, no. March (2019).

———. "Development of Coffee Trade Flows." ICC 121–4, no. March (2018).

———. "Growing for Prosperity – Economic Viability as the Catalyst for a Sustainable Coffee Sector." 2019.

———. "Survey on the Impact of Low Coffee Prices on Exporting Countries." ICC 124–4, no. March (2019).

International Coffee Organization (ICO). "Relationship between Coffee Prices in Physical and Futures Markets." International Coffee Organization, London, 2011. <http://www.ico.org/documents/icc-107-4e-prices-markets.pdf>.

Jackson, Tim. "Prosperity Without Growth." *Sustainable Development*. Vol. 14, 2009. <https://doi.org/10.1111/j.1530-9290.2009.00213.x>.

Jay Walljasper. "Elinor Ostrom's 8 Principles for Managing A Commons." On the Commons, October 2, 2011. <https://www.onthecommons.org/magazine/elinor-ostroms-8-principles-managing-commons>.

- Luttinger, Nina, and Gregory Dicum. *The Coffee Book: Anatomy of an Industry from Crop to the Last Drop*. The New Press, 2011.
- Mars Incorporated. "Farmer Income Lab." 2018.
- Meadows, D., 1999. *Leverage Points: Places To Intervene In A System*. [ebook] Hartland: The Sustainability Institute. Available at: <[http://www.donellameadows.org/wpcontent/userfiles/Leverage\\_Points.pdf](http://www.donellameadows.org/wpcontent/userfiles/Leverage_Points.pdf)>
- Palladino, Lenore. "Inclusive Ownership Funds for the United States." Roosevelt Institute, May 15, 2019. <https://rooseveltinstitute.org/inclusive-ownership-funds-for-the-united-states/>.
- Panhuysen, S. and Pierrot, J. "Coffee Barometer." 2018.
- Paper, Background. "Ed 2303/19 28." no. May (2019).
- Raad, Thomas. "Specialty vs Commodity: How Yield, Quality, & Prices Interact." Perfect Daily Grind, 2017. <https://www.perfectdailygrind.com/2017/12/specialty-vs-commodity-yield-quality-prices-interact/>.
- Raney, Terri, Gustavo Anríquez, André Croppenstedt, Stefano Gerosa, Sarah K. Lowder, Ira Matuschke, and Jakob Skoet. "The Role of Women in Agriculture." 2011.
- Sachs, Jeffrey, Kaitlin Y. Cordes, James Rising, Perrine Toledano, and Nicolas Maennling. "Ensuring Economic Viability and Sustainability of Coffee Production." no. October (2019): 155.
- Syal, Rajeev. "Employees to Be Handed Stake in Firms under Labour Plan." *The Guardian*, September 24, 2018. <https://www.theguardian.com/politics/2018/sep/23/labour-private-sector-employee-ownership-plan-john-mcdonnell>.
- Thompson, Steve. "Three Horizons Thinking." Zapnito, 2019. <https://community.zapnito.com/users/4671-steve-thompson/posts/40954-the-three-horizons-framework>.
- Tong, Scott. "How Oil-Rich Venezuela Ended up with a Miserable Economy." Marketplace, April 5, 2016. <https://www.marketplace.org/2016/04/05/how-plummeting-global-oil-prices-have-devastated-venezuela/>.
- Topik, Steven. "The Making of a Global Commodity: Part 1: Out of Arabia." Specialty Coffee Association News, 2017. <https://scanews.coffee/2013/10/04/the-making-of-a-global-commodity-out-of-arabia/>.
- . "The Making of a Global Commodity | Part 2: Coffee Comes to the Americas." Specialty Coffee Association News, n.d.
- United Nations Food and Agriculture Organization. *Commodity Market Review 2003–2004*, 2013.
- Vigneri, M. and Shashi Kolavalli. "Growth through Pricing Policy: The Case of Cocoa in Ghana." Background Paper for UNCTAD-FAO Commodities and Development Report, 2017.
- Ward, Heather. "2017 U.S. Specialty Coffee Consumption Trends." Specialty Coffee Association News, November 29, 2017. <https://scanews.coffee/2017/11/29/2017-u-s-specialty-coffee-consumption-trends/>.

