# A Window into Relationship Coffee

Building a Supplier Dashboard for Sustainable Harvest

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# Executive Summary

Sustainable Harvest Inc. (SH) is a specialty coffee importer headquartered in Portland, Oregon. SH sources unroasted (green) coffee beans from 18 countries in Latin America and Africa and sells to roasters in the United States, Canada, and Australia. Over the past 17 years, SH has pioneered the "Relationship Coffee Model" as a method of direct trade, providing significant investment and trainings to producers at origin to facilitate improved coffee bean quality, protect against environmental and price risks, and improve farmer livelihoods. SH also strives to increase transparency along the supply chain.

At its core the mission of our project was to help SH develop a standardized and effective process for communicating to its customers (coffee roasters) the value-add of engagements – including sustainability-related interventions – along its supply chain. We accomplished this by creating an annual supplier survey of farmers in SH's supply chain, which allows SH to monitor various performance and process metrics over time. By tracking this information, Sustainable Harvest is able to measure the progress its suppliers are making in:

- Employing best-in-class labor standards and advancing the livelihoods of smallholder farmers;
- Growing consistent, high quality coffee;
- Implementing sustainable agronomic practices and promoting resilient farming communities;
- Developing long-term relationships within Sustainable Harvest and with other capacity builders.

As a final deliverable, we created a dashboard which Sustainable Harvest can use to communicate to its customers key supplier metrics, allowing them to "know" their suppliers. Finally, we worked to predict and evaluate future challenges and recommended solutions that should help Sustainable Harvest's relationship coffee model, with its new dashboard, thrive for years to come.

# Background

## Overview of Sustainable Harvest

Sustainable Harvest Inc. (SH) is a green specialty coffee importer headquartered in Portland, Oregon with offices in Mexico, Nicaragua, Colombia, Peru and Rwanda. SH purchases green coffee beans from 18 countries, including Central and South America and East Africa, and sells to roasters in the United States, Canada, and Australia. Over 95% of the green coffee purchased and sold by SH is Organic, and over 85% is Fair Trade certified. SH customers include small local roasters, mid-size regional and national roasters, and large public company roasters like Keurig Green Mountain. In the late 1990s, SH pioneered the "Relationship Coffee Model," and for the past 17 years, it has been promoting and championing this model throughout the specialty coffee supply chain. This method utilizes direct trade and involves significant investment throughout the supply chain, in particular at origin. SH sources coffee from both smallholder farmer cooperatives (co-ops) and single-family estates, providing training to increase quality, protect against environmental and price risks, and improve overall farmer livelihoods. This allows the farmers and cooperatives to continuously improve the quality and flavor of their coffee and in turn receive a higher price.

## Problem Context/Statement

These important investments form strong bonds between SH and its supplier base. However, SH has yet to develop an effective and standardized process for communicating the benefit of its investment in the supply chain to all of its stakeholders, which include customers (roasters), farmers, financiers, strategic partners, and industry associations. Amidst an increasingly competitive environment, this lack of communication is making it more and more difficult for SH to justify its price premium to roasters. Moreover, roasters have begun imposing their own supplier checklists onto SH, and it has become increasingly clear that SH needs both the data and a process in place to respond to these checklists in an efficient manner.

Keurig Green Mountain (KGM), a key SH customer, has issued requirements that have a direct impact on what Sustainable Harvest commits to tracking and monitoring for the farmers with whom they work. KGM has also set two targets it seeks to achieve by 2020: 1) Engage 1 million people in their supply chain to significantly improve their livelihoods, including water security and climate resilience; 2) source 100% of primary agricultural and manufactured products according to established KGM Responsible Sourcing Supplier Guidelines. In 2014, KGM updated their Supplier Relationship Management Process as a way to ensure their suppliers are capable of meeting expectations, provide transparency on KGM's expectations, and drive

continuous improvement. The Responsible Sourcing Guidelines align with the following international standards: International Labor Organization (ILO), United Nations Universal Declaration of Human Rights, United Nations Millennium Development Goals, United Nations Global Compact, Ceres Principles, Sustainable Agriculture Network, Fairtrade Labeling Organizations International Standards, and Stockholm Convention/Rotterdam Convention on Persistent Organic Pollutants. KGM is one of the largest purchasers of Fair Trade Certified Coffee, producing over 40 million pounds in 2014, and aims to achieve 100% traceable United States coffee purchases by the end of 2016.[1] All of this is to say that Sustainable Harvest is oftentimes reliant on the demands of its top customers.

Finally, the non-financial and non-operational data available and accumulated across Sustainable Harvest is inconsistent, resulting in unreliable and incomplete reporting of the company's social and environmental impact. In order to effectively communicate the value and results of its investments to stakeholders, SH needs a standardized process and system to track, qualify, and quantify the positive impact that it is making on its supply chain.

For our project, we first sought to address this need by working with SH to determine the key metrics necessary to assess the qualitative and quantitative impacts of the company's investments over time. Second, we sought to provide SH with a formalized, systematic approach for gathering, analyzing, and displaying the collected data to inform a more robust monitoring and evaluation program. Finally, we worked with SH to determine how best to visualize the data through the use of a dynamic customer dashboard. In this way, we hoped to provide SH with an edge over direct trade coffee competitors, help SH get ahead of the demands from roasters, and facilitate SH's communication of the heart of its value proposition to all of its stakeholders.

## Project Scope and Methodology

As a team, we began our project with a call with Sustainable Harvest COO DeeAnn Jurgens to understand the current situation and pain points. Prior to heading on-site for a week-long visit to Sustainable Harvest's Portland headquarters in May, we conducted a literature review of the coffee industry, educating ourselves on the coffee supply chain and the major players throughout its various segments. Once on-site, we received a formal introduction to the Checkmark Program, its goals, and current status by speaking with those who had developed the project to date. The Checkmark Program is the name that SH has given to its effort to qualify, quantify, and visually depict its positive supply chain impact. It was a vision that had yet to be realized – our task was to take the program from idea to implementation.

We started by reviewing SH's initial annual farmer diagnostic survey, while also comparing it with two surveys produced by the Committee on Sustainability Assessment, COSA and COSiTA. The COSA and COSiTA surveys both attempt to assess the conditions in which coffee is produced. The COSA survey focuses on the individual farmer producers; it does not focus heavily on the production of crops, but does focus on the income farmers receive. Alternatively, COSiTA is aimed at the cooperative level and limits its financial questions to certifications. All three sets of questions were considered for inclusion in the final supplier survey.

[1] Keurig Green Mountain website.
http://www.keuriggreenmountain.com/en/Sustainability/ResilientSupplyChain/SupplierGuidelines.aspx

Additionally, SH had recently received a new supplier survey from its largest customer – Keurig Green Mountain – and also had an example of a supplier survey from Allegro Coffee, a wholly owned subsidiary of Whole Foods Market. These served as useful proxies for the type of information that customers were beginning to require of suppliers such as SH, and were incorporated into the question inclusion analysis.

By using these resources, conducting internal interviews, and undertaking a rigorous literature review, we determined what information we needed to collect from farmers to meet the stated objectives of the Checkmark Program as initially outlined. We then created a modified survey — using both new and existing questions—that would allow SH to efficiently retrieve this information from cooperatives, keeping in mind factors such as survey fatigue and how existing certifications would overlap.

Our end goal was to not only have a survey of manageable length, as the initial diagnostic survey was unwieldy, but to also have one where the questions were organized by subject matter, and we worked with Sustainable Harvest to group them into the four "pillars" of the Checkmark Program – Responsible Sourcing, Quality, Resilience, and Relationships.

After an intense week, we left Portland with considerable progress made on our project, and a plan of attack in place for the rest of the summer. We spent much of the time dividing questions into the four pillars and deciding which metrics should be displayed on a dashboard. For this, we once again relied on the conversations we held with Sustainable Harvest and our independent research. All of this work then informed a dashboard prototype that we designed and shared with SH. At the end of the summer, when Sustainable Harvest began piloting our survey, we were able to demo this prototype with real data and present it to the company. This was completed in early fall. The final stage of work included advising SH on best practices for administering the survey and for ensuring the highest quality data finds its way into the dashboard.

# The Origins of the Checkmark Program

As we have discussed, *Relationship Coffee* is at the core of Sustainable Harvest's business model. In effect this means bridging the gap between the communities that grow coffee and the people who buy, roast, sell, and consume coffee. As a result, SH's target customer is a roaster who wants to have a deep understanding of where their beans are coming from and the people who are involved with their production. Since its inception as Aztec coffee back in the 1990s, Sustainable Harvest has invested in relationships with its suppliers. It has provided training on how to improve yields, increase quality, and mitigate financial risk. Through *Let's Talk Coffee*, SH's annual coffee conference, the company facilitates dialogue between different players in the value chain, including farmers and roasters. All of these initiatives help SH to secure a consistent supply of high quality coffee. However, the company has struggled to find an efficient mechanism to communicate the results and benefits of *Relationship Coffee* to its customers. From this challenge, Checkmark emerged as a potential solution.

The goal of the Checkmark Program is to create an engaging and comprehensive dashboard that gives roasters insight into Sustainable Harvest's supply chain and helps them identify the perfect coffee for their customers. To achieve this goal, Sustainable Harvest needed to go beyond just sharing the coffee variety, cupping score[2] and price. SH is selling to a premium coffee market that is increasingly demanding information on a range of factors from human rights to agronomic practices. As of 2015, premium coffee comprised 26% of the overall U.S. market revenue. The recent IBISWorld Industry Report on United States Coffee Production reported that "while concerns about ethical sourcing practices have distressed the industry, some industry operators have developed a strong customer base by attracting environmentally-conscious consumers."[3] Sustainable Harvest therefore needed a robust supplier survey to gather important information that can be tracked over time. However, roasters are unlikely to read lengthy reports or survey results. Therefore, Sustainable Harvest needed a way to highlight key metrics and display the information in an accessible and digestible format.

## Creating the Survey

Rather than creating questions from scratch, our team drafted questions from a variety of sources. Sustainable Harvest had compiled a long list of questions drawn primarily from the Committee on Sustainability Assessment's COSA and COSiTA surveys. We also created additional questions through our discussions with the SH Sales Team and the Keurig Green Mountain and Allegro supplier surveys. To verify that we were asking the right questions, we reviewed a variety of sustainability and industry reports including those from Keurig Green Mountain, Fair Trade USA, Café Direct and Root Capital. From this secondary research we were able to identify important questions that were missing from our original lists.

We had to navigate the tension between creating a survey that covered as much ground as possible while also minimizing survey fatigue. We knew that including too many questions would compromise the quality of data we would receive. We accomplished this in several ways. First, we identified which questions could be auto-filled by looking at what certifications that

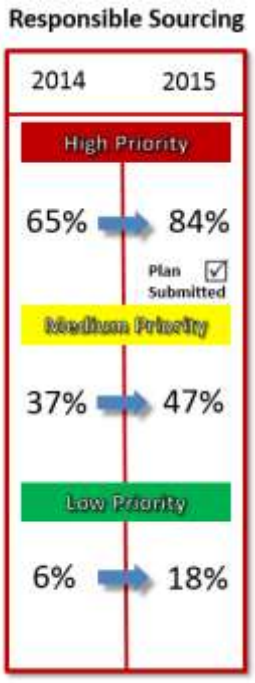
[2] Coffee is scored on a 0-100 scale by certified Q-cuppers or graders, who are trained to evaluate the coffee

[3] Sarah Turk, IBISWorld Industry Report 31192a - Coffee Production in the US. September 2015.

producer had. For example, a Fair Trade certified co-op would have many questions from Responsible Sourcing automatically completed (See Appendix 7 for overview of certifications). Second, we added secondary and tertiary layers to the survey so producers would only see sub-questions if they applied to them. Finally, we combined similar questions and utilized checkboxes and drop down menus whenever possible.

**The Four Pillars:** The Checkmark Program divides the producer survey into four pillars: Responsible Sourcing, Quality, Resilience, and Relationships. Each of these pillars speaks to an important component of building a consistent and sustainable supply of high quality coffee. Each of these pillars also provides Sustainable Harvest with valuable information about their supply chain. The company can use this information to increase the effectiveness of its site visits at origin, focus its attention on suppliers that are under-performing, and track progress over time. Since all of this information cannot be displayed on the dashboard, each pillar displays specific key metrics that were deemed most salient for roasters. Each pillar is described in detail below.

## Responsible Sourcing




*Definition*: For Sustainable Harvest, responsible sourcing is a commitment to only source coffee from farms that respect the human, cultural, and labor rights of their workers, while striving to continually reduce their environmental footprint and increase their social impact. This responsibility extends to their work training producers on best agricultural practices, risk management, quality assurance, and business excellence in an effort to increase farm-level productivity in a sustainable manner and in support of the implementation of our relationship coffee model.

*Why It Matters to Customers*: Downstream coffee companies are increasingly concerned about issues in their supply chain. Many of Sustainable Harvest's customers will advertise to the end consumer (coffee drinkers) that their beans are ethically sourced. This pillar confirms that the suppliers are complying with a range of criteria that could affect the quality of the product or the safety and well-being of workers.

*Relevance to Sustainability:* Sustainability speaks to both environmental and human impacts. The Responsible Sourcing pillar looks at issues ranging from slavery, to proper communication of wages and benefits, to the use of banned chemicals.

*Understanding the Metrics*: The Responsible Sourcing survey questions are compliance oriented. In other words, each question has a desired response, usually a "Yes" or a "No." For example, "Are workers free to leave employment with reasonable notice and without penalty as defined by the local law?" or "Do you have a harassment and discrimination policy in place that workers are aware of, including protections for religious and cultural expression?". Sustainable Harvest recognizes that no supply chain is perfect and suppliers all have areas to work on. Therefore, the dashboard records the questions to which the supplier gave the preferred answer and measures their progress against the previous year. However, not all questions are of equal gravity.

Therefore, all of the Responsible Sourcing questions have been categorized into one of four groups 1.) Non-negotiable 2.) High Priority 3.) Medium Priority 4.) Low Priority.

| Color | Category | Examples | Response Required/Continuous Improvement |
|---|---|---|---|
| Purple | Non-Negotiable | Trafficking, slavery, abuse, serious safety violations, child labor, etc. | Given the gravity of these violations Sustainable Harvest will immediately suspend business with these producers until the problem is resolved and assurances are in place that it will not happen in the future. |
| Red | High Priority | Unlicensed third party labor contractors, minimum wage, discrimination policies, etc | Action plans are to be submitted to Sustainable Harvest within 3 months and implementation should begin within 6 months |
| Yellow | Medium Priority | Payroll and attendance records, employee injury records | Implementation on required changes to begin within 1 year. |
| Green | Low Priority | Occupational and process trainings | Implementation on required changes should begin within 3 years |

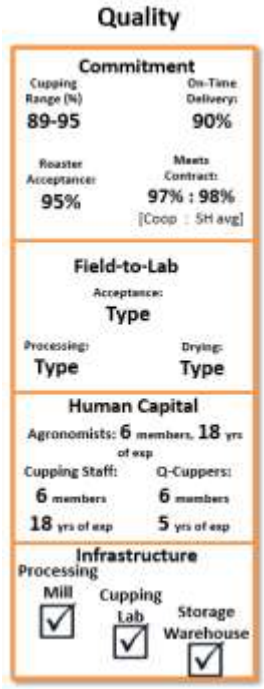
Each category has a different expectation from the supplier and a different path for continuous improvement. Our recommendation is that the non-negotiable "purple" items form the ***Sustainable Harvest Promise*** – a guarantee that at a bare-minimum, all suppliers comply with these items that are critical for a responsible, ethical supply chain. SH can and should use this as a tangible way to communicate its sourcing standards and as a clear differentiator from its competition (See Appendix 6 for the Pledge).

For the red, yellow, and green priority items, the Responsible Sourcing section of the dashboard depicts the percentage compliance for each category year-over-year, as well as an indication of whether or not the cooperative has submitted action plans for improvement.

## Quality

*Definition:* Sustainable Harvest's quality commitment spans the lifecycle of its coffee, from the milling and drying processes its farmers use, to the Q-cuppers at origin who meticulously test the coffee. This firm commitment can be seen in the finished product that roasters buy: Sustainable Harvest's average coffee rating is a ____ and _____% of the farmers it works with are either Fair Trade and/or Organic certified. Finally, this commitment extends to the timeliness of its product, leading to an on-time delivery rate of _____%.

*Why It Matters to Customers*: Sustainable Harvest's customers care about many things related to where their coffee comes from. However, the quality of the product is essential. SH is selling to increasingly discerning consumers who will not pay a premium for coffee that doesn't meet their




standards. In addition to product quality, they also demand reliable logistics. Whether they are small scale entrepreneurs or major players like Keurig Green Mountain, late shipments or ones that do not meet customer expectations impact SH's bottom line.

*Relevance to Sustainability:* The ability of a farmer or co-op to make investments in a core sustainable production process hinges on their ability to get a good price for their beans. This means access to the growing premium coffee segment is hugely important. To gain access to this market, farmers must be able to consistently grow high quality beans, process and sort those beans accurately and ship them on-time.

*Understanding the Metrics:* The Quality pillar is divided into four discrete sections. The first section is Commitment, which gives four key performance metrics to demonstrate the co-op's ability to bring a consistent quality product to market on time. The second section is Field-to-Lab, which highlights the methods and techniques used to get the coffee from the field and into the cupping lab. Third is Human Capital, which shows what kind of talent the co-op has invested in. Finally, the Infrastructure section identifies whether the co-op owns or has access to physical infrastructure associated with quality control (See Table 1 below for definitions).

## Table 1: Quality Pillar Metrics

| Metric | Definition |
|---|---|
| **Commitment** | |
| Cupping Range | Range of cupping scores from SH contracts, based on the 0-100 scoring system, what is the lowest and highest cupping scores that this cooperative has delivered in previous SH contracts (in the last 3 years). |
| On Time Delivery | Percentage of the time that the cooperative's coffee contracts have made it to the roaster in fulfillment of the date specified on the contract with the Roaster (last 3 years). |
| Roaster Acceptance | Percentage of the time that the cooperative's coffee contracts have been accepted in fulfillment of the contract with the Roaster (last 3 years). |
| Meets Contract | Percentage of the time a cooperative's coffee cupping score meets or exceeds minimum contract expectation as compared to the average score for all SH cooperative contracts. |
| **Field-to-Lab** | |
| Acceptance | What procedures are used to sample and evaluate beans upon arrival? |
| Processing | What processing techniques are used (washed, semi-washed, dry/natural)? |
| Drying | What drying methods are used (natural of mechanical): Natural drying, Mechanic drying, Does not dry the coffee, Other<br>If Natural: Raised beds, cement patios, earthen patios, on tarps, solar dryers if Mechanic: aired, cylindrical dryer, horizontal dryer, other |
| **Human Capital** | |
| Years Producing | How many years this co-op has been producing specialty coffee? |
| Agronomists | How many agronomists are employed by this co-op? |
| Cupping Staff | How many cuppers does the co-op employ? |
| Q-Cuppers | How many certified Q-Cuppers does this co-op employ? |
| **Infrastructure** | |
| Processing Mill | Does this co-op own a processing mill? |
| Cupping Lab | Does this co-op own a designated cupping lab? |
| Storage Facility | Does this co-op have a storage facility that is able to preserve the quality of their harvest? |

## Resilience

*Definition:* A resilient supply chain is one that is increasingly able to absorb uncertainty and invest in the capability of future generations to thrive and sustain business operations. Resilience is influenced by social, environmental, and financial factors and impacts people inside and outside the coffee industry.

*Why It Matters to Customers:* Relationship Coffee is based on building trust, knowledge and connection between producers and consumers of coffee. Therefore, Sustainable Harvest wants to demonstrate to its customers that the producer that they buy from today will be able to weather the storms of the industry and bring its product to market for years to come. Furthermore, many roasters want to buy coffee from producers that are respecting the environment and investing in their local community. This is attractive to roasters, because they want to feel their business is having a positive global impact. It is also important because a producer that is able to sustain its business over time will also retain considerable best practices and industry knowledge.

*Relevance to Sustainability:* The classic definition of sustainability is living and producing in a way that meets our needs today without compromising future generations' ability to meet theirs. Resilience has this view of sustainability at its core. It looks at the ecosystems, financials, and communities that surround a co-op and asks if its operations and investments make it more or less likely that it will continue to produce premium coffee, healthy environments, and thriving local economies in the future.


*Understanding the Metrics:* The Resilience pillar is divided into three sections. The first is Agronomic Best Practices, which highlights where the co-op and its farmers are utilizing best practices to ensure a healthy ecosystem. For each of the seven major categories listed below, a producer can receive a "check" if they meet a certain threshold determined by Sustainable Harvest. Research into other coffee companies showed us that many firms look to see if a co-op simply has a policy or plan in place for these areas. We believe this is a good starting point, but Sustainable Harvest can go further to verify that the producer is actually executing on their strategy. The second category is Price Risk Management, which indicates how secure a producer is from financial and market risk. Finally, Community provides information on how the cooperative engages with its local community, indicating if they are reinvesting price premiums to create a more resilient ecosystem in the long term (See Table 2 below for definitions).

## Table 2: Resilience Pillar Metrics

| Metric | Definition |
|---|---|
| **Agronomic Best Practices** | The practices and methods that farmers incorporate into their growing that decreases negative impacts on the environment while improving the quality of the coffee. |
| Soil | What are they doing to fight erosion and maintain nutritious soil? |
| Forestry | How are they combating deforestation and managing existing forests in their region? |
| Water | What are they doing to keep water clean and well managed where water is scarce? |
| Biodiversity | Are they practicing intercropping or other techniques to promote species richness and abundance? |
| Energy | Where are they getting their energy? How are they working to access renewable energy sources or cut energy use? |
| Productivity | What inputs are they using to increase yields and how are they storing and disposing of those inputs? |
| Waste | What processes are used to manage bio and non-biodegradable waste? For example, are they using a composting system? |
| **Price Risk Management** | A set of tools that protects farmers from volatility in the price of coffee. Sustainable Harvest believes that by employing these measures its farmers can not only survive, but thrive, ensuring a sustainable coffee supply for years to come. |
| Price Insurance | Do they use coffee futures contracts as a means of reducing exposure to market fluctuations? |
| Liquidity Ratio | Is this producer able to pay short term liabilities given a temporary downturn? This can be measured by current assets/current liabilities. |
| Price Variance | Calculates the additional benefit accrued to the co-op by participating in the variable sale program. |
| **Community Investment** | A resilient community is one that makes strategic investments, facilitates transformative opportunities and ensures the necessary protections so that community members can thrive economically and culturally. This is evidenced by improved health, better education and strong livelihoods within and beyond the coffee business. |
| Investment Programs | What programs does this co-op have that invest in its local community (list of offerings that the producer provides to its member farmers)?<br>(ex. After-school program, gender inclusion program, etc) |
| Seeking Funding | Are there any programs or projects for which this co-op is seeking external funding or in-kind support? |

## Relationships

*Definition:* Coffee producers do not exist in a vacuum; they interact with many different individuals and institutions. The size and type of these networks is a critical factor in a coffee cooperative's long-term success. Internal networking through Sustainable Harvest at trainings, workshops and Let's Talk Coffee events can offer cooperatives the chance to grow their networks and learn new skills. In addition, external networking, primarily through financiers, allows cooperatives access to the capital they need to constantly improve their operations. This pillar tracks internal networking with Sustainable Harvest at trainings, workshops, and Let's Talk Coffee events as well as external networking, primarily through financiers and capacity building partners.


*Why It Matters to Customers:* When producers are well networked and supported they have access to trainings, capital, and strategic partnerships. This improves their operations, which can increase the quality of their crop, enhance logistical performance, and improve environmental impact.

*Relevance to Sustainability:* Producing more sustainably is not simply a decision. It is a process by which a producer learns about different methodologies and technologies and where they can find the resources to implement them. This process is expedited when a producer has a good network to draw on.

*Understanding the Metrics:*

| Category | Definition and Benefit |
|---|---|
| **Let's Talk Coffee Attendance** | Each year Sustainable Harvest organizes large gatherings of its supply chain either by country or worldwide. Theses summits connect roasters and producers, provide opportunities for trainings and sharing of best practices. |
| **Financing and Capacity Building Partners** | There are a variety of institutions that producers can utilize for capacity building and access to financial capital. For example, Root Capital and Findeca. |
| **Trainings Completed** | What trainings offered by Sustainable Harvest have they participated in? These trainings include price risk management and quality control. |

# Key Learnings

In late summer, Sustainable Harvest administered a pilot survey in Mexico, using the new survey completed by the Dow Fellows team. Our team then rolled out a mock dashboard, complete with data from the pilot survey. While the survey was seen as a success, there were some issues with incomplete data and missing questions, and the Dow team stressed the importance of mitigating these matters as soon as possible. These concerns, among others, are preventable if focus is given to the following:

- **Procedural Roadblocks** – Version control issues from Excel to iForms and iForms to the new dashboard. Too many databases and tools can lead to confusion and duplicative work, which will further hamper the process as the survey is rolled out across the entire supply chain.
- **Survey Obstacles** – Survey translation and consistency of survey administrators. Both are important, especially because the survey is only administered once annually. A related challenge is the Portland office's ability to properly guide this process from start to finish, considering implementation is carried out on different continents.
- **Verification Challenges** – At present, some SH producers receive third party verification on things such as being certified organic – as a result, SH can use this data to auto-fill certain questions in its survey, thus decreasing the total number of questions asked. However, Sustainable Harvest still often relies on a cooperative's word during much of the survey process. In the future, SH could consider its own verification process. This would be logistically challenging from a cost and staffing standpoint, because spot checks would likely be needed to provide reliable data. In theory, this route could yield greater margins if such a certification became trusted and desirable for farmers to pursue.
- **Dashboard Potential** – The dashboard can become an even greater tool for advancing the goals of roasters and farmers. The team believes there is great potential in further improving upon the current version of the dashboard.

Hurdles aside, the investment in the dashboard will only be justified if the company now commits to promoting it within its supply chain and rolling it out in a way that encourages its use. At the end of the day, if the dashboard is not being used, it will not meet its full potential.

## Next Steps & Recommendations

Moving forward, we recommend several next steps that will help Sustainable Harvest successfully roll-out the new producer survey and increase the performance of the dashboard. These can be broken down into five buckets:

1) **Codify the Process**. The pilot surveys in Mexico were a great first step; however, ultimately the goal is for this process to be codified into standard operating procedures so it lives on and gets deployed to Sustainable Harvest's entire supplier base. SH must determine and define a scalable process for administering the survey. As mentioned earlier, it is imperative that Sustainable Harvest strike the appropriate balance between diligence and efficiency when doing this. An ideal survey administering process is one that maximizes automation and answering accuracy, while minimizing ex-post manual human review. Regardless, a codified process is essential.

2) **Train Survey Administrators**. Building off codifying the process, a key next step is to train the individuals who will be responsible for administering the survey – most likely origin employees. Survey results are only as good as the data that flows into them, and consistency is key in order to measure meaningful trends over time and across locations. Training could be done remotely, but would likely be the most effective if undertaken in person at the Portland office through a week-long seminar. Origin employees could come to the Portland office to learn best-in-class survey administering and data collection practices. SH can and should build off the detailed work already done in this space by organizations such as the Grameen Foundation and Grassroots Business Fund. High quality, well-defined survey administering guidelines will be essential to the success of this endeavor.

3) **Auditing and Verification**. Ultimately, the dashboard will only be as good as the data is trustworthy. When it comes to on-time delivery or coffee cupping score, there is little opportunity to fudge the data, but in other areas (e.g. policies related to workers' rights) we are oftentimes relying on a cooperative's word. Our concern is that, in light of the ramifications of violating the Sustainable Harvest Pledge, the incentive structure discourages cooperatives to report abuses.

   Sustainable Harvest also needs to be very careful, because when it comes to reported abuses its reputation is on the line. Negative press about its supply chain could devastate its credibility with customers. As a result, we believe Sustainable Harvest should create a process for auditing survey results to ensure long-term process validity and integrity. It is possible that this may be best accomplished through third-party assistance. Sustainability report auditing is a growing field and it may be in Sustainable Harvest's best interest from both a cost and expertise standpoint to tap into this.

4) **Suppliers – Increase Visibility.** We believe Sustainable Harvest should use the dashboard to let cooperatives promote themselves as well as projects they are working on, while putting a human face on their operations. The Fellows Team envisions a version 2.0 of the dashboard that would allow cooperatives to solicit funding or in-kind

support for sustainability-related projects and facilitate discussions between roaster and cooperative. We also believe cooperatives could be given the chance to highlight unique aspects or successes of their farms by submitting photographs and vignettes. This would also help SH have a healthy bunch of stories to reference when promoting their work and the people behind the beans. Overall, we believe the dashboard's successful integration into Growerspace could create a one-stop shop for both suppliers and roasters.

5) **Roasters: Improve Functionality**. The current version of the dashboard only allows for a cooperative by cooperative view, but we recommend adding another layer of the dashboard to depict each customer's "portfolio" of coffee purchased. This roaster home screen would display their portfolio of coffee and aggregate all performance metrics in the same manner. The ideal dashboard would also have the ability to be customized in accordance with each roaster's preferences. In this way, a company would be able to focus on the metrics that it cares most about, while ignoring ones that are not deemed relevant or important.

# Conclusion

Sustainable Harvest engaged our Dow Fellows team because the company wanted advice on how to best convey the value-add of its supply chain: delivering premium coffee in an environmentally and socially sustainable way. As a result of our efforts, SH now has a condensed producer survey tailored to the four tenets of its CheckMark Program, along with a streamlined and improved process for collecting data. In addition, we created a new dashboard that could become a potent tool for the company to increase sales, thus enhancing the value of its supply chain sustainability efforts. Ideally, the goal is for this program to lead to more demand from roasters, which in turn should signal to farmers that adhering to SH's strong labor and environmental standards will be good not only for workers and the community, but for business as well.

# Appendix 1: Our Team & Acknowledgements

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We would like to thank the Dow Fellowship Program for giving us the opportunity to embark on this project (including funding), and specifically Anne Wallin for her advice and guidance throughout. We would also like to thank David Griswold and DeeAnn Jurgens at Sustainable Harvest for being so open to working with us and co-creating this project, as well as Claudia Aleman, Sara Morrocchi, Matt Innes, and Julia Leitner who provided support throughout. Finally, we would like to thank David Morse, professor at the Ford School of Public Policy, for his advice during the writing process.

# Appendix 2: Coffee Supply Chain

The coffee supply chain can be broken down into six discrete steps:

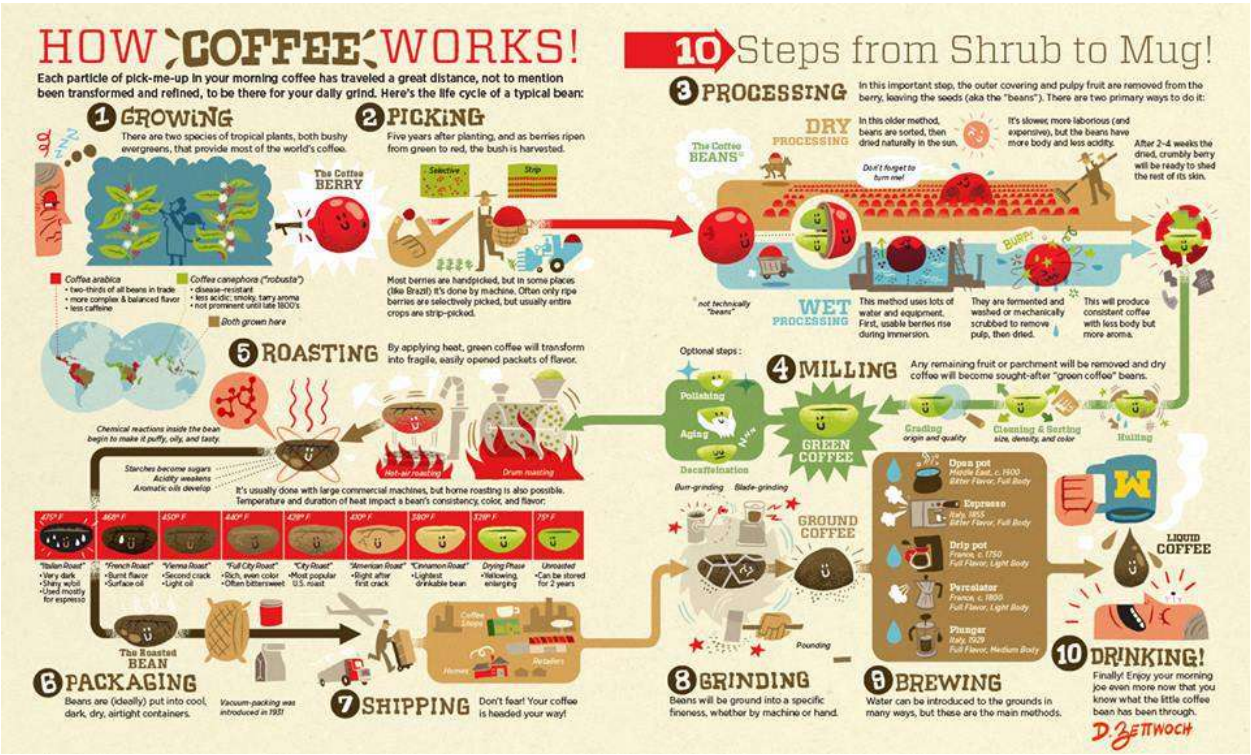
**Growing**: Arabica and Robusta are the two types of coffee plants that provide the majority of the world's coffee. A coffee plant takes five years to mature.

**Picking**: Once mature, the coffee bush is harvested as the berries are picked (typically by hand).

**Processing & Milling**: The coffee plant produces a cherry, which is converted through dry (natural) or wet (fermented-and-wash or machine-assisted) processing into the green beans. In dry processing, the cherries are spread out and dried to the optimal moisture content, which typically takes 2-4 weeks. In wet processing, the cherry pulp is removed prior to drying by being immersed in water and then run through a pulping machine. After processing, the beans are taken to a mill to be hulled, sorted, graded, and bagged. The dry coffee at this point is green coffee beans ready for export.

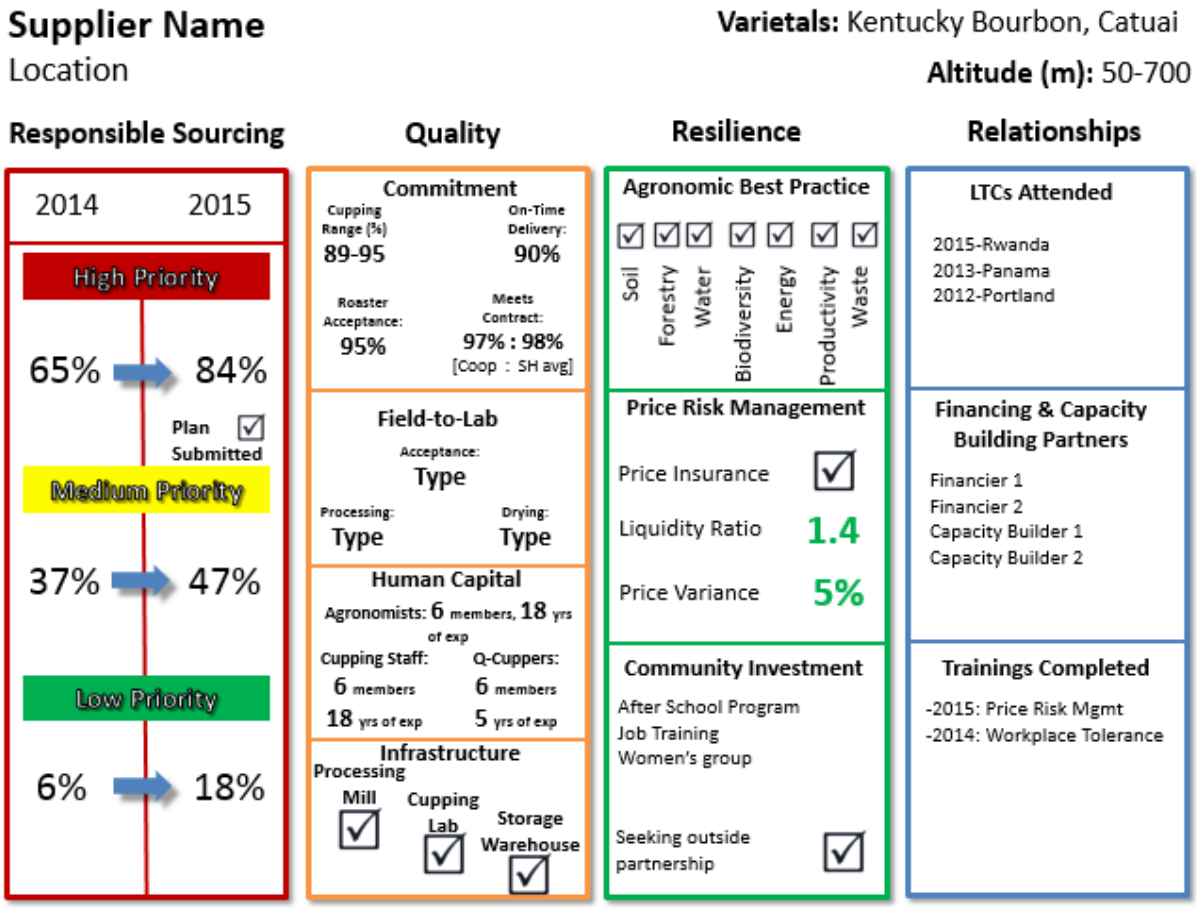
**Roasting**: Roasters purchase the green beans from importers such as Sustainable Harvest, then roast them to produce the desired consistency, color, and flavor.

**Grinding/Brewing**: Right before brewing, roasted beans are ground into a specific fineness, then brewed for the final coffee product.




Source: https://coffeebyproxy.files.wordpress.com/2014/04/bps-coffee-steps.jpg

# Appendix 3: Dashboard Mockup



# Appendix 4: Dow Symposium Poster

**Dow Sustainability Masters/Professional Fellows Symposium '15**

## SUSTAINABLE HARVEST COFFEE IMPORTERS

**Authors: Joanna Herrmann (MBA/MS), Danny Patton (MBA/MS), John Serron (MBA/MS), Chris Wolff (MPP/MS)**

DOW SUSTAINABILITY FELLOWS PROGRAM

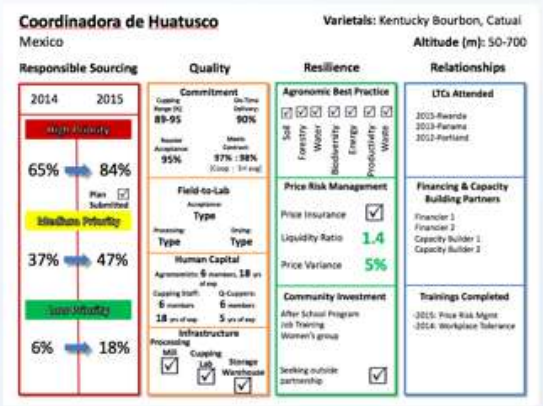
### ABSTRACT

Sustainable Harvest Inc. (SH) is a green specialty coffee importer headquartered in Portland, Oregon. SH sources unroasted (green) coffee beans from 18 countries in Latin America and Africa and sells to roasters in the United States, Canada, and Australia. Over the past 17 years, SH pioneered the "Relationship Coffee Model" as a method of direct trade, providing significant investment and trainings to producers at origin and increasing transparency along the supply chain. This investment facilitates improved coffee bean quality, protection against environmental and price risks, and improved farmer livelihoods.

Our project was to help SH develop a standardized and effective process for communicating its investment impact in the supply chain to all of its stakeholders through creation of an annual supplier survey and resulting engaging and informative customer (roaster) dashboard.

By tracking this information, Sustainable Harvest is able to measure the progress their suppliers are making in:

- Employing best-in-class labor standards and advancing the livelihoods of smallholder farmers;
- Growing consistent, high quality coffee;
- Implementing sustainable agronomic practices and promoting resilient farming communities;
- Developing relationships within Sustainable Harvest and with other capacity builders.




### DASHBOARD OVERVIEW

| | |
|---|---|
| Responsible Sourcing | *Does this supplier meet SH's standard for labor, environment and governance?* |
| Quality | *What does this co-op do to ensure a great product is getting delivered on time?* |
| Resilience | *Is this co-op investing in the right areas to still be making great coffee in the future?* |
| Relationships | *Who does this co-op know to help them succeed?* |

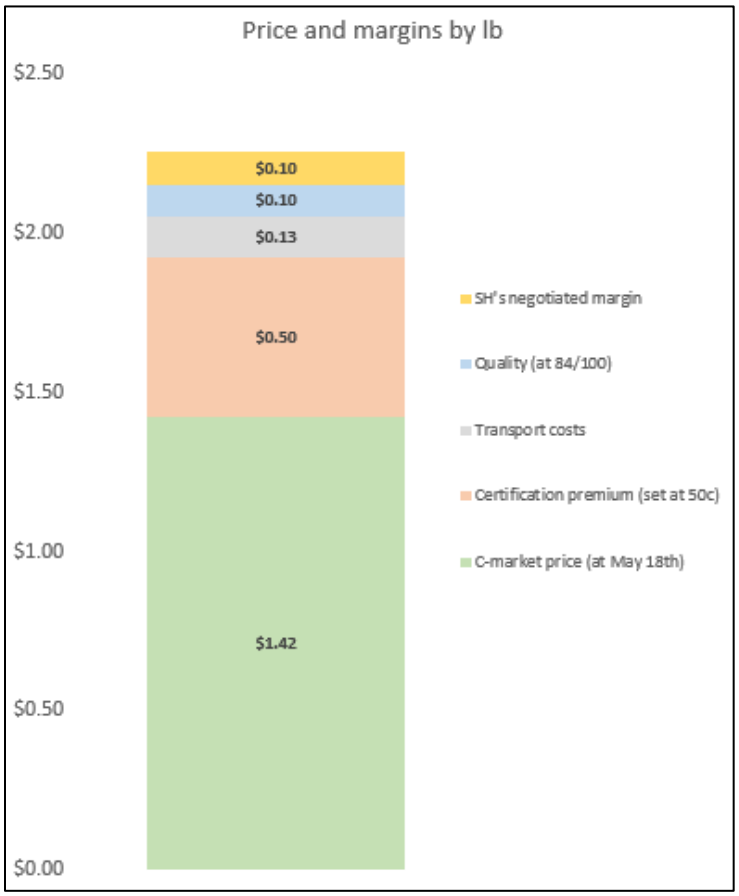
### MAY SITE VISIT: PORTLAND

In mid-May, we traveled to Sustainable Harvest's headquarters in Portland, Oregon to work on-site for a week. We worked closely with staff to kick-off the project, interviewed employees from across the company, and, as our photos can attest, even learned how Q-cuppers taste-test premium grade coffee using the Sustainable Harvest Tastify app.

### ACKNOWLEGEMENTS

We would like to thank the Dow Fellowship Program for giving us the opportunity to embark on this project, and specifically Anne Wallin for her advice and guidance throughout. We would also like to thank David Griswold and DeeAnn Jurgens at Sustainable Harvest for being so open to working with us and co-creating this project, as well as Claudia Aleman, Sara Morrocchi, Matt Innes, and Julia Leitner who provided support throughout.

# Appendix 5: Sustainable Harvest Pricing Transparency




Notes: C-market price as of May 18th, fluctuates

## Appendix 6: The Sustainable Harvest Promise

Sustainable Harvest is committed to sourcing its coffee responsibly and has pledged to only work with farmers who meet the following criteria:

- [Note: separate this into separate Yes/No questions] Do any of the following occur: sale and trafficking of persons, debt bondage, serfdom, forced or compulsory labor, forced or compulsory recruitment for use in armed conflict, indentured or prison labor of any kind, procuring or offering of a person for illicit activities (e.g. production and trafficking of drugs), instigating coercive payment arrangements.
- When recruiting and hiring is subcontracted, do you ensure that the third party labor agencies (brokers) engaged operate legally and have a valid business license issued by an appropriate authority?
- Are workers free to leave employment with reasonable notice and / without penalty as defined by the local law?
- Do you involve persons under 18 in work which is likely to harm their health, safety, or morals? (Health could include unhealthy environments that expose children to hazardous substances or temperatures/noise levels damaging to their health)
- Are workers under 18 ever involved in work that exposes them to physical, emotional or sexual abuse?
- Do you employ anyone under the age of 15, or the legal minimum, whichever is greater for anything other than light work?
- Do you provide workers with the legal amount of breaks throughout the work day, with no unreasonable restrictions placed on the use of washrooms and drinking of water? Add: "Do all workers residing in an employer-operated residence have access to safe and sanitary living conditions?
- If you provide monetary advances or loans to workers, are they provided in accordance with the laws of the countries in which you operate?
- When you hire, employ, compensate, or promote workers, do you ever consider factors other than their ability (i.e., race, color, gender, age, ancestry, religion, political opinion, marital/civil union status, national origin, genetic information, sexual orientation, gender identity, place of birth, veteran status, indigenous status, disability or any other characteristic protected by local, state or federal law)
- Do you provide all workers with compensation, benefits, and safe working and living conditions (when residing in an employer-operated residence) similar to those of national workers?
- Do men and women receive equal pay for work of equal value?
- Do you ever sanction employees with any of the following methods (individual Y/N) for disciplinary or in response to reporting harassment: corporal punishment, significant monetary fines, mental or physical coercion, or verbal abuse of workers, or sanctions that result in wage deductions, reductions in benefits or compulsory labor?
- Are there ever any restrictions to workers' documents (passports, work permits, birth certificates), including on weekends and holidays? If yes, when? Is this communicated in advance to the workers?
- Do you use any chemicals or pesticides that have been banned, including but not limited to those under the Stockholm Convention, or listed in the Rotterdam Convention on Persistent Organic Pollutants?
- Do you fully comply with all legal or generally accepted / protections accorded to indigenous peoples?

# Appendix 7: Coffee Certification Matrix

| Certification | Organic (c. 1967) | Fair Trade (c. 1970s) | Rainforest Alliance (c. 1992) | Utz (c. 1997) |
|---|---|---|---|---|
| **Mission** | Create a verified sustainable agriculture system that produces food in harmony with nature, supports biodiversity and enhances soil health. | Support a better life for farming families in the developing world through fair prices, direct trade, community development, and environmental stewardship | Integrate biodiversity conservation, community dev't, workers' rights, and productive ag practices to ensure comprehensive sustainable farm mgmt. | Achieve sustainable ag supply chains, where producers are professionals implementing good practices which enable better businesses, livelihoods, and environments |
| **Code Elements for Coffee Production** | Environmental, farm production, and processing standards | Social, economic, environmental, democratic organization of cooperatives | Best management practices, conservation of natural resources, ecosystems and wildlife, workers' rights and benefits, and benefits to local communities | Socially, environmentally, and economically conscious growing standards. |
| **Scope** | Federal standard applies to all organic product sold in US | Baseline and progress criteria, plus continuous improvement required. Applies to all democratically organized cooperatives. | 200+ criteria, field-tested indicators, applies to farms and cooperatives of all sizes. Continuous improvement required. | Baseline criteria with field-tested indicators and independent, 3rd-party auditing. Farms and cooperatives of all sizes. Continuous improvement required. |
| **Inspection Frequency and Accreditation** | Annual inspections | Annual inspections by independent inspectors | At least annual audits by teams of scientists trained by RFA | Independent auditors accredited to ISO 65 standard, 10% surprise audits |
| **Price premium** | Avg price differentials of $0.255 per pound | Min of $1.25/lb plus $0.10/lb social premium; add'l $0.20 if coffee also certified organic | Doesn't set prices, but helps give farmers tools to succeed; generally 5-10 cents/lb | Avg $0.07/lb (Arabica, 2008) |
| **Pounds certified in 2007/08** | 81 million imported into US and Canada | 450 million pounds | 197 million pounds | 170 million |
| **Key differences**[4] | No use of prohibited substances (most synthetic pesticides) on land for at least 3 years | No requirements about shade-grown or organic. | No shade-grown or organic requirement; seal allowed to be used on package with only 30% certified beans | Environment standards are fairly general and lack specificity, no shade-grown requirement |

[4] http://www.coffeehabitat.com/certification-guide/

# Appendix 8: Sustainable Harvest Producer Survey

| Primary Question | Secondary Question | Tertiary Question |
|---|---|---|
| Type of producer | Cooperative, Estate, Individual | |
| Name of cooperative or farm | | |
| Number of Coop Members | | |
| Number of Association Coops | | |
| Country | | |
| Certifications | | |
| Number of FT Certified Association Coops | | |
| Number of RFA Certified Members | | |
| Number of UTZ Certified Members | | |
| Number of Organic Certified Members | | |
| Number of ISO Certified Members | | |
| Assign To | | |
| | Name of Interviewee | |
| | Email of Interviewee | |
| | Name of Coop Director | |
| | Email of Coop Director | |
| | Name of farm owner | |
| | Email of Farm Owner | |
| | Name of farm administrator | |
| | Email of Farm Administrator | |
| Town, province, country | | |
| Unit of measure landholdings | hectares, acres (.4 hectares), manzanas (.75 hectares)/cuadras, caballerías (44 hectares) | |
| Total area | | |

| | | |
|---|---|---|
| Total Area (Hectares) | | |
| Total area in coffee | | |
| Total Area (Hectares) in Coffee | | |
| Volume of annual production (total kg) | | |
| Volume organic coffee (kg) | | |
| Volume shade grown coffee (kg) | | |
| Volume available for Sustainable Harvest (kg for export) | | |
| Lowest Altitude | | |
| Highest altitude | | |
| Varietals | Bourbon : Red<br>Bourbon : Yellow<br>Castillo<br>Catauí<br>Catimor<br>Caturra : Red<br>Caturra : Yellow<br>Colombia<br>Colombia F6<br>Costa Rica 95<br>Geisha<br>Laurina<br>Maragogype<br>Mokka<br>Mundo Novo<br>Oro Azteca<br>Pacamara<br>Pacas<br>Pache<br>Robusta<br>Sudan Rume<br>Typica<br>Other (specify) | |
| Harvest Season | | |
| Shipping Months | | |
| Number of employees | Number of members/employees who are | |

| | | |
|---|---|---|
| | women | |
| Localization | | |
| Year Established | | |
| Number of years working with Sustainable Harvest | | |
| | | |
| Do any of the following occur: | | |
| | Sale or trafficking of persons | |
| | Debt bondage | |
| | Forced or compulsory labor | |
| | Forced or compulsory recruitment for armed conflict | |
| | Indentured or prison labor | |
| | Procuring or offering of a person for illicit activities (e.g. production and trafficking of drugs) | |
| | Coercive payment arrangements | |
| | None of the above | |
| Do you use third party labor agencies (brokers) to obtain workers? | If yes: | |
| | When recruiting and hiring is subcontracted, do you ensure that the third party labor agencies (brokers) operate legally and have a valid business license? | |
| | Do you pay all fees related to services provided by third party labor agencies that are in excess of one (1) month's salary of the worker concerned, unless otherwise allowed by law? | |
| | Is transportation for labor provided by third party brokers safe and free of charge? | |
| | Is payment managed by third party brokers? | If yes: |

| | | |
|---|---|---|
| | | Do you ensure that laborers are not underpaid, deceived, or unfairly fined? |
| | | How do you ensure this? |
| Are workers free to leave employment with reasonable notice and without penalty as defined by the local law? | | |
| Are workers' personal freedoms as defined by local law restricted at any time? | | |
| Do you identify the age of workers through legal documentation showing their date of birth? | | |
| Do you employ any persons under the ages of 18? | If yes: | |
| | Do you involve persons under 18 in work which is likely to harm their health or safety? (Health could include unhealthy environments that expose children to hazardous substances or temperatures/noise levels damaging to their health) | |
| | Are workers under 18 ever involved in work that exposes them to physical, emotional or sexual abuse? | |
| | Do you employ anyone under the age of 15, or the legal minimum, whichever is greater for anything other than light work? | |
| Do you have policies and procedures in place to ensure that you conduct business in an ethical and legal manner which, at a minimum, requires compliance with all applicable laws, rules and regulations of the countries in which you operate? | | |

| | | |
|---|---|---|
| Do you provide workers with a description in the appropriate language (written or verbal) of their employment terms, including: wages, benefits, duration, disciplinary policies, grievance procedures, resignation procedures, and overtime requirements? | | |
| Do you provide workers with a clear wage statement, in the appropriate language, each pay period, demonstrating how wage payments are calculated? | | |
| Do you pay overtime to workers in accordance with the laws of the country in which you operate? | | |
| Is overtime ever mandatory? | | |
| If you use any payment system other than hourly wage (ex. workers paid according to volume produced or piece rate), do you ensure workers receive at least minimum wage? | | |
| Do you keep accurate and complete payroll and attendance records, and ensure that workers have access to these records upon request? | | |
| Do you have a maximum workweek for workers of 60 hours per week (including normal and overtime hours) with at least twenty-four hours of consecutive rest? | | |
| Are farmers/workers able to confidentially communicate concerns to management? | If yes: | |
| | Are there ever any negative consequences for doing so? | |
| If monetary advances or loans are provided to workers are interest rates and fees in accordance with the laws of the country you operate in? | | |
| Do you ever use any of the following methods for disciplinary action? | | |

| | | |
|---|---|---|
| | Corporal Punishment | |
| | Significant Monetary Fines | |
| | Mental or Physical Coercion | |
| | Verbal Abuse of Workers | |
| | Wage Reductions | |
| | Reductions in Benefits | |
| | Compulsory Labor | |
| | None of the Above | |
| Do you have a zero-tolerance policy for violence against workers? | | |
| Do you provide safeguarding services for employees? | If yes: | |
| | Do you write safeguarding policies in the appropriate language / understood by workers? | |
| | Do you provide the worker with proof of receipt of documents being safeguarded? | |
| | Do you facilitate the replacement of identification documents, or other valuables lost or misplaced while in their custody, at no cost to the worker? | |
| | Are there ever any restrictions to workers' documents (passports, work permits, birth certificates), including on weekends and holidays? | If yes: |
| | | Describe when documents are restricted. |
| | | Is this communicated to employees in advance? |

| | | |
|---|---|---|
| When you hire, employ, compensate, or promote workers, do you ever consider factors other than their ability? (i.e., race, color, gender, age, ancestry, religion, political opinion, marital status, nationality, sexual orientation, place of birth, veteran status, indigenous status, disability or any other characteristic protected by local, state or federal law) | | |
| Do men and women receive equal pay for work of equal value? | | |
| If you employ foreign laborers, do you ever pay employees differently based on nationality? | | |
| Do you have a harassment and discrimination policy in place that workers are aware of, including protections for religious and cultural expression? | | |
| Are there indigenous peoples within your zone of operation? | If yes: | |
| | Do you fully comply with all legal, or generally accepted, protections accorded to indigenous peoples? | |
| | Do your operations negatively impact these communities in any of the following ways? | |
| | | Reduce/contaminate water supply |
| | | Pay below minimum wages |
| | | Destroy/damage natural environment |
| | Do you educate you employees on the rights of indigenous people? | |

| | | |
|---|---|---|
| Do you provide workers with the legal amount of breaks throughout the work day, with no unreasonable restrictions placed on the use of washrooms and drinking water? | | |
| Do you offer employer owned housing? | If yes: | |
| | Are these accommodations free from safety hazards? | |
| | Are these accommodations sanitary? | |
| Are workers provided the opportunity to eat during the work day? | | |
| Do employees have access to potable water? | | |
| Do employees have access to sanitary? | | |
| Are medical services and supplies such as first aid kits available to workers in convenient locations? | | |
| Do you provide occupational and process training to workers related to general workplace safety hazards and injury response? | | |
| Do you keep records of workers that have been injured on the job? | | |
| Is the workplace appropriately ventilated, with adequate lighting and equipped with an appropriate number of unblocked and unlocked exits? | | |
| Do you use any chemicals or pesticides that have been banned, including but not limited to those under the Stockholm Convention, or listed in the Rotterdam Convention on Persistent Organic Pollutants? | | |
| Are workers provided with personal protective equipment against agrochemicals and other substances at no cost? | | |
| Do you appropriately store and dispose of hazardous agrochemicals? | | |

| | | |
|---|---|---|
| How many agronomists do you employ? | | |
| Quality range for commercial coffees | 80-81, 81-82, 82-83, 83-84, 84-85, 85-86, 86 + | |
| Quality range for specialty coffee | 80-81, 81-82, 82-83, 83-84, 84-85, 85-86, 86 + | |
| Do you have a policy related to your product's quality that you follow? | | |
| Do you have record-keeping systems for quality control? | If yes: | |
| | Digital/Physical | |
| Do you provide feedback to the members related to their coffee quality? | | |
| Do you have a cupping laboratory? | If yes: | |
| | How many cuppers do you have? | |
| | How many Q graders do you have? | |
| What cupping format do you use? | SCAA/COE/Other | |
| Do you use Tastify? | | |
| Select the treaceability systems that you use: | List of certified producers | |
| | List of conventional producers | |
| | Tags of coffee from the producer | |
| | Warehouse reception receipt | |
| | Identification of pallets | |
| | Identiifcation of lots | |
| | Issuance of invoices | |
| | None | |
| | Other | |
| *Does the cooperative own a wet mill? | if yes: | |
| | What percent of the coffee is wet milled by the cooperative? | |
| What processes do you use? | Multi select % of each: NA, wet process (washed); semi-washed; dry process (natural); other | |
| Do you use an ecological mill and practice ecological processing? (<40 L. water used per kg. of parchment) | | |

| | | |
|---|---|---|
| *Does the cooperative own a drying facility or common drying area? | if yes: | |
| | What percent of coffee is dried by the cooperative? | |
| What drying methods do you use? | % Natural (sun dry) | |
| | | Multi select % of each: Plastic tarps; cement patios; raised beds; other |
| | % Mechanical | |
| | | Multi select % of each: Aired; cylindrical dryer; horizontal dryer; other |
| | | What is the main fuel/energy source for your dryers? |
| Who owns the dry mill facility? | Select: Estate/ Cooperative/ Private Company (specify) | |
| What is the evaluation process when the parchment coffee is received by the cooperative or private company mill? | Visual appearance, Bean size, Defect count, Humidity, Weight, Other (specify) | |
| Do you own the warehouse where green coffee is stored? | | |
| Where is your main storage facility located? | | |
| What type of storage do you use? | Bags/Silo | |
| | | Lbs/Kg |
| | | Storage capacity? (in bags) |
| | | Do you use pallets? |
| | | Is there adequate ventilation? |
| What humidity level do you require for exporting green beans? | <10%, 10-11%, 11-12%, 12-13%, >13% | |
| What percentage of your batches do you sample? | | |
| What is the procedure if the sample is rejected? | Lot separation/ Change lot/ Other (EXPLAIN) | |
| | | |
| *Does your organization require members to have soil analyses? **Have you performed a soil analysis within the past 3 years? | If yes: | |

| | | |
|---|---|---|
| | Have you implemented a soil nutrition plan based on the soil analysis? | |
| Do you or your members have soil erosion on their farms? | If yes: | |
| | How do you plan to mitigate soil erosion? | |
| Do you have policies and/or strategic plans regarding any of the following: | | |
| Do you have policies concerning the conversion of forest into production land? | | |
| Do you have lands undergoing reforestation? | | |
| Do you monitor water resources and usage? | | |
| Do you have a policy for water resource management? | | |
| What are your greatest water dependencies? | Multi Select: Aqueduct, spring, lake, reservoir, river, groundwater, rainwater collection, other | |
| Do you have policies for monitoring and reducing water pollution? | | |
| What percent of your wastewater emissions are properly filtered and treated? | | |
| *What percentage of your members engage in either water reuse or recycling efforts? **Do you reuse or recycle water? | | |
| * On average, how much water do members use to wash 1 kg of cherries ? **How much water do you use to wash 1 kg of cherries? | | |
| Do you practice intercropping? | If yes: | |
| | What percent of land is used by intercropping? | |
| | What different crops are used? | |
| Do you practice ecosystem/habitat restoration and rehabilitation? | If yes: | |

| | | |
|---|---|---|
| | What percent of your land is dedicated to forest and habitat conservation? | |
| Do you have specific policies and programs in place to promote food security such as implementing vegetable gardens, animal husbandry and crop diversification? | | |
| Do you track and report your energy use? | | |
| What are the sources of your electricity: | (mult choice with percent slider - nuclear, oil, coal, natural gas, solar, hydropower, wind, biodigestors, unsure, other (specify)) | |
| | Specify Other | |
| | Nuclear | |
| | Oil | |
| | Coal | |
| | Natural Gas | |
| | Solar | |
| | Hydropower | |
| | Wind | |
| | Biodigestors | |
| | Unsure | |
| | Other | |
| Do you monitor your greenhouse gas emissions and air pollution? | | |
| On average, how far does the coffee have to travel to get to the port (in km)? (including transportation from the farm to the mill) | | |
| What kind of transportation do you use to transfer the coffee to port? | | |
| Do you make all workers and organization members aware of prohibited chemicals such as pesticides and herbicides? | | |

| | | |
|---|---|---|
| Do you provide training on integrated pest management (IPM)? (pest control through non-chemical biological control, habitat manipulation, cultural practices) | | |
| * What percentage of your members compost? **Do you compost? | | |
| Do you provide fertilizer to your members? **Do you apply fertilizers to your fields? | If yes: | |
| | Is it organic or inorganic? | |
| Do you practice proper treatment and disposal of solid and non-solid waste? | If yes: | |
| | *Do you track what % of your members implement waste management on their farms? | |
| | What percentage of members implement waste management? | |
| Do you recycle and separate waste? | | |
| If your organization has applied for grants, what is the total grant donation dollars invested in community? | | |
| What organizations have you used for capacity building/training? (i.e. TechnoServe, USAID) | | |
| *Which of the following does your organization provide to its members? **Which of the following services do you provide to employees? (Check off any you provide) | | |
| *How many hours per year of training/support are given to smallholder farmers from the cooperative? **How many hours per year of training/support are given to employees? | | |
| What is the cost of membership (annually)? please include units or currency | | |

| | | |
|---|---|---|
| What percentage of your members are current on their membership dues? | | |
| Do you provide loans or credit to your members or employees? | | |
| | | |
| Have you used price insurance for your crops? | | |
| Have you participated in any Price Risk Management trainings hosted by other companies (not SH)? | | |
| How do you learn about current coffee bean prices? | | |
| Do you contract insurance for your cargo transport? | | |
| Do you have access to credit and financing? | If yes: | |
| | List the financial institutions that provide you financing and the length of time you have received financing from each institution | |
| | Do you have other sources of financing? | |
| | What is the average interest rate charged by these financial institutions? | |
| | What percentage of your sales contracts are financed? | |
| Are there barriers the organization faces in obtaining financing? | If yes: | |
| | If the funding request is rejected, what reasons are given? | |
| How long have you had a business relationship with Sustainable Harvest? | | |
| Has someone from the organization attended Sustainable Harvest trainings in the past? | | |
| | If so, which trainings have you attended? | |
| Have you attended any of the following Sustainable Harvest events? | | |

| | | |
|---|---|---|
| What are your main training needs going forward? | | |
| What are the principle services that SH should be providing? | Multi-Select: Signed Letters of Credit, Training Materials, Market Updates, Financing Info, Other (specify) | |