



WHOM DOES TRANSPARENCY SERVE?

The Ethics of Data Collection in Specialty Coffee

By Nani Ferreira-Mathews



ABOVE

Fungo Francis. *Photo courtesy of Mountain Harvest*

PRECEDING PAGE

Coffee falls. *Photo courtesy of Mountain Harvest*

AS WE SEEK TO UNDERSTAND, define and implement the concept of transparency in the specialty coffee value stream, there is one key question we must explore: What does the industry hope to achieve through the collection and sharing of data? In an era that saw the rise of Big Data, how does data advance or constrain social, political and economic relations? How does the transparency of data define the power dynamics between supply chain stakeholders, those whose data is being collected, and those who are collecting the data? To explore these questions and gain a better understand of the work being done on this front, this article—the first in a two-part series—will focus on several organizations that are focused on providing the service of data collection, tracking and distribution.

It is important to note that information transparency is not an ethical principle in itself. Transparency is ethically neutral. Transparency of information can enable or impair ethical principles such as fairness, accuracy and accountability, dependent on whether the information is truthful or not. On the other hand, the elaboration of data into meaningful information that is shared transparently is not ethically neutral, and those processes should be fully disclosed. If transparency providers are not sharing the ethical principles to which they gather, interpret and share information, then there is no way to ensure ethical principles are enabled. To that end, if these information providers are not consistent in their ethical principles and aims, the transparency provided becomes impossible to evaluate.

For the scope of this article, transparency can be defined as any data collected at the farm, cooperative, importer, roaster or retail level that has been made available to the public (through reports, guides,

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A member of the Rural Women's Cooperative, a predominantly coffee-producing cooperative organized through the ATC, in the community of La Lima, Matagalpa. *Photo courtesy of ATC Nicaragua*

applications, or services both free and paid), for the purpose of informing market actors with an end goal of creating a sustainable supply chain. Furthermore, there are two layers of transparency at play here; one where a roaster or importer is transparent about what they paid for their green coffee, and another where the producer is informed about what other producers are getting (so that they can at least ask for similar prices). These two types of transparency are supplied by separate actors in the supply chain. It was the consensus, in the interviews that follow, that transparency of this data at the import and retail levels should be used to achieve a greater value distribution to origin stakeholders, specifically coffee producers. Ultimately, the value of this transparency must be realized by the consumer, who is willing to pay the price and create the demand.

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In Colombia, Alexander Barrett, a California native and businessman, founded the transparency service iFinca in an effort to build a more ethical supply chain. Barrett was inspired after visiting a Colombian coffee farm, when he asked the coffee growers how they set their prices. They simply replied, "We don't." Barrett was shocked to discover that the coffee farmer often has no market control when it comes to price setting. iFinca was Barrett's answer to the problem. In his early research, Barrett found a case study involving fishermen in India. The study found that fishermen coming back into port often went to the first available dock to sell their catch, often not knowing until later that other buyers were paying higher prices. However, as cell phones became more popular, fishermen would share the prices through text messaging. It was this case study that helped Barrett come up with the



The Ambrose family. *Photo courtesy of Mountain Harvest*



mobile-phone-based application iFinca.

iFinca uses blockchain technology to store a ledger of transactions and the price data of 14,000 farmers in seven countries (and counting). This service provides price discovery for farmers and a comprehensive look at the supply chain for roasters, including farm gate price, cupping score, process, variety, growing altitude and spot pricing. Barrett explains how this can affect coffee producers: "Prior to now, the farm gate [price] was hidden or just not obtainable. But with the transparency of the farm gate, the coffee industry can now have discussions about living wage, living income of margins on cost of production. It's no longer hidden but [has been] brought into the light. You can never solve the pricing crisis if we, as industry, don't have this data point."



iFinca also provides consumers with a "meet the farmer" feature using QR codes. Consumers who scan the QR codes will be directed to a website with information about the farmer, including a bio, the farm size, process, growing altitude and variety, but with no information about price. Barrett sells this service to importers, with costs of services provided baked into the service but never passed on to the farmer. He assures that the farmer will always have free access to the data.

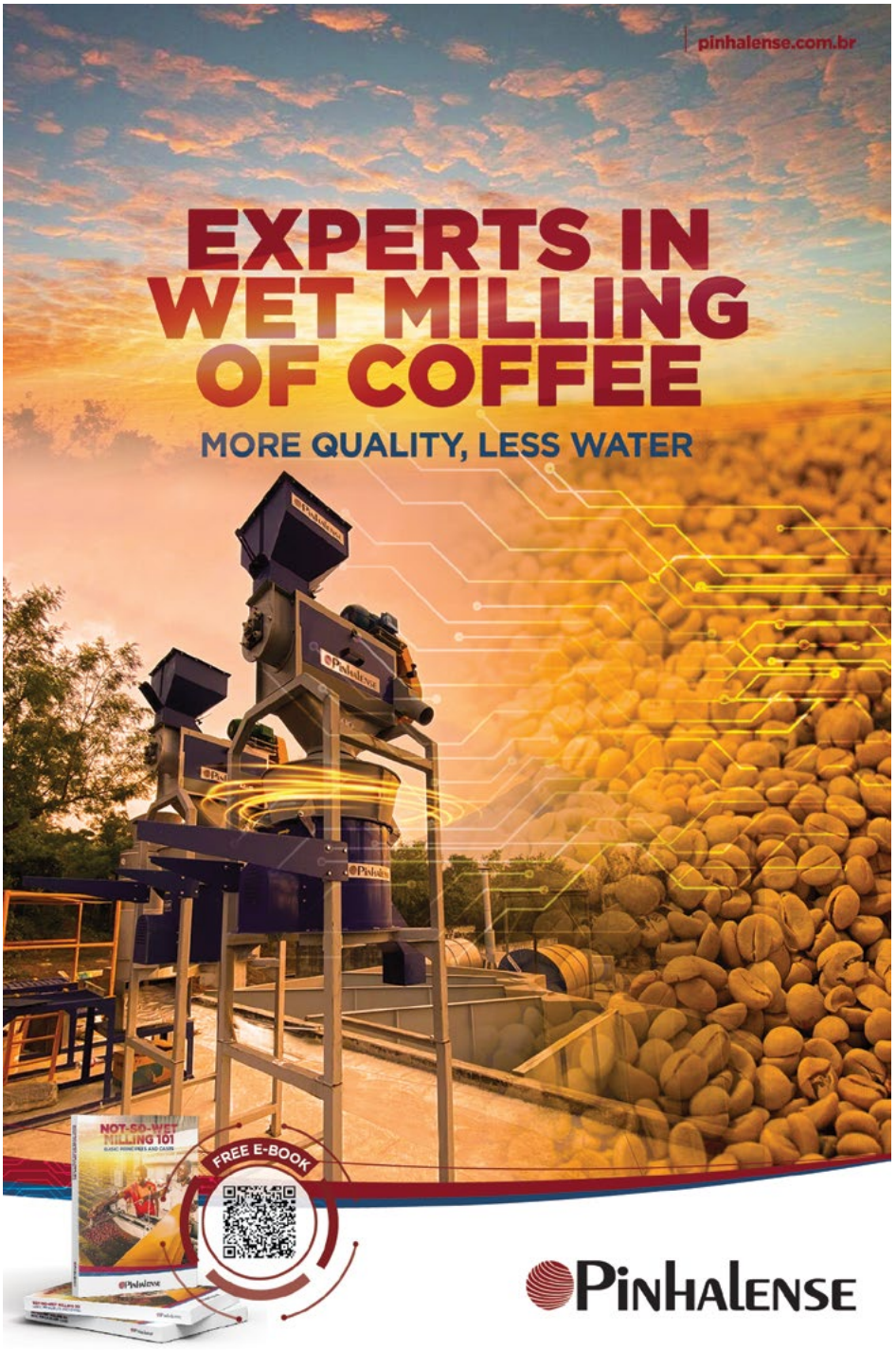
Erika Takeo, a member of Nicaragua's Asociación de Trabajadores del Campo (ATC), and International Relations Secretariat, works with 50,000 smallholder farmers in Nicaragua. This year, her focus has been mainly on coffee farmers. When asked whether farmers she works with know about or use phone apps for price discovery, she replies curtly, "No. Not at all." While cell phones are ubiquitous in Nicaragua, it's rare that a coffee farmer will have a smartphone, she says. Sometimes a younger family member might have a smartphone, Takeo explains, but they often have low storage and the phone is used by the entire family.

Takeo admits, "It's difficult to get to the place we want to be with transparency." She has been a part of a year-long effort within the ATC to export a container of specialty coffee from the smallholder coffee farmers in the Jinotega region of

Nicaragua. Their biggest challenge is a lack of data on their previous crops due to poor record-keeping. They don't have cupping scores or previously paid prices on record, and importers and intermediaries need this information. "I know a lot of coffee farmers who grow at the right altitude under shade and all these things you see on packaging in the U.S.," she says. "And yet, farmers sell for such a low price because they need to sell it." In theory, she notes, technology from companies like iFinca could help if they work with farmer organizations like ATC.

Kenneth Barigye, managing director of daily operations for Mountain Harvest, a "purpose-based" processing and trading intermediary in Uganda, says that transparency should be used to give a fair value to the farmer. "Farmers know the international price," he says. He's skeptical about new products, as some products that try to give farmers more information often do not account for additional services provided. Mountain Harvest, a project under the Lutheran World Relief impact investing arm, was founded five years ago in response to a Mt. Elgon cooperative going bankrupt.

Barigye explains that services offered by Mountain Harvest—such as agroecology training, processing infrastructure, financial literacy for money saving and loans, crop pre-finance and links to other financial institutions, and tools for working toward gender equity—are examples of amenities that may not be recorded in transparency efforts. This year, Mountain Harvest has started working with Enveritas, a New York City-based nonprofit verification service. Enveritas, founded in 2016, has a mission to "end global poverty in the coffee sector by 2030," according to information on its website. Enveritas helps companies make truthful, independently verified sustainability claims about products they purchase, as outlined in the organization's Claims Framework, available for download from the Enveritas website. The verification process measures three pillars of sustainability: social, environmental and economic. One area of focus is on transparent pricing and ensuring that





Christine, quality cupping. *Photo courtesy of Mountain Harvest*

prices paid are open and available to farmers in either free on board (FOB) or farm gate price.

One question Enveritas asks is, "Does the farmer know how much we are paying them?" Barigye explains that an answer might be recorded as "77 percent of FOB price goes to the famer." He's concerned that no one is focusing on the 23 percent that is going to the services, which are working to produce better yield and quality. He explains that while Enveritas is providing data on price, by focusing on a small part of the supply chain, it can leave so much out.

Nick Kirby, partnerships manager at Enveritas, says that this kind of feedback is helpful. The specific questions on Enveritas' surveys are kept secret and can change often. "If we reveal the methodology of our survey, then people can prepare for it," Kirby says. "We've designed it to not be so obvious and to not lead a respondent towards a specific answer. We try to gather the reality of what's going on without any judgement about it." Because of this process, he says, "the question might not be so direct." In a way, neither are the answers. Enveritas does not share specific data or the answers it receives. Enveritas asks questions, then creates a scoring logic and aggregate answers to obtain final results. "It's binary," Kirby says.

Rick Kellett, managing director of impact investing for Mountain Harvest, illustrates this problem: "Some farmers might only receive 80 percent of FOB price and not get any services in return. This is really awkward," he says, explaining that not all buyers are as well-meaning as others. He thinks that farmers want to use FOB prices, but the dilemma in comparing those prices independently remains that the services offered are not always transparent. Barigye agrees that transparency efforts focusing on the price paid to farmers could make it seem as if they are getting a "bad deal," but "services rendered have to provide sustainability," he says.

Mountain Harvest's relationship with Enveritas is still new; however, Kellett says, "What I like about [their] transparency is that they are putting the cost to the buyer." He explains that services like Fair Trade USA put the pressure on the producer to pay for verification, while Enveritas puts the pressure on the roaster.

Ed Canty, general manager of Cooperative Coffees, says the price is too high. Enveritas offers to verify roasters' coffee contracts through its service for only $0.02 per pound. That might seem like a small price to a roaster, but often that data has already been collected, Canty says. While Enveritas' focus is on unorganized smallholder producers, the organization will verify any coffee purchase for a roaster or importer. Cooperative Coffees, a green coffee importer founded in 1999, offers contract transparency on all its imports and already gathers farm-gate pricing information from its producer partners. Canty echoes Barigye's concern that sometimes those numbers don't translate. "It takes a heroic amount of effort to get good data from origin," Canty says. He cautions that the industry must ask companies like Enveritas, "Why are you collecting this data?" He says tools for price discovery can empower farmers, but warns, "If it's non-cursory, then we drink our own Kool-Aid and think we're great."

Canty encourages companies like iFinca to think about scale. "To get a producer to use new products like iFinca, their customers have to use it, and roasters need importers to use it." He says that the industry



Farmer at his home. *Photo courtesy of Mountain Harvest*

needs a unified system and encourages companies to work with the Specialty Coffee Association (SCA) to try to create one. Cooperative Coffees already maintains an open-to-the-public record of its contracts and transactions on *fairtradeproof.org*, and it is developing its own internal blockchain system.

Cooperative Coffees isn't alone. Mountain Harvest is building a similar technology for its company. The technology it is building is open source, and provides scores, farm data and consumer-facing QR codes that roasters can use on their bags to provide transparency, similar to iFinca. Kellett hopes that Mountain Harvest's open-source technology will help other agri-businesses and potentially pivot to other industries such as healthcare inventory management.

While companies independently determine how much of their data to share publicly, and build internal web and mobile apps, there is one sweeping effort of data reporting known as the Specialty Coffee Transaction Guide. This independent annual report receives data from green buyers from more than 80 companies in an effort to build a bigger picture. The data received, including scores, FOB price and region, is anonymized and amalgamated before its release. The findings are not always cheerful. "Forty percent of data in last year's guide represented contracts that had a median price that is below the cost of production," says Chad Trewick, co-founder of the Specialty Coffee Transaction Guide. That percentage may come as a shock to some readers, but Trewick explains that the report's goal is not to shame or condemn, but to inform. "The topic of price is nebulous and taboo," he says, "We know there is a gap, and this [guide] allows companies to work on an effort to make change." It's not just informative to coffee buyers; the guide also shows farmers the prices and empowers them to ask for similar prices.

Even with this growing data set, Trewick says, "We have all these prices, and we can't even say what they mean." He elaborates: "One of the reasons we don't know is because the economic environment varies greatly." Trewick lists a series of other transparency efforts—Beyco, Farmer Connect, Olam At-Source, Ecomm—and warns that without a standard of transparency, the industry could become like the adage, "The fox watching the hen house." He's somewhat skeptical of iFinca, but when it comes to Enveritas, he says, "I believe this is different thing."



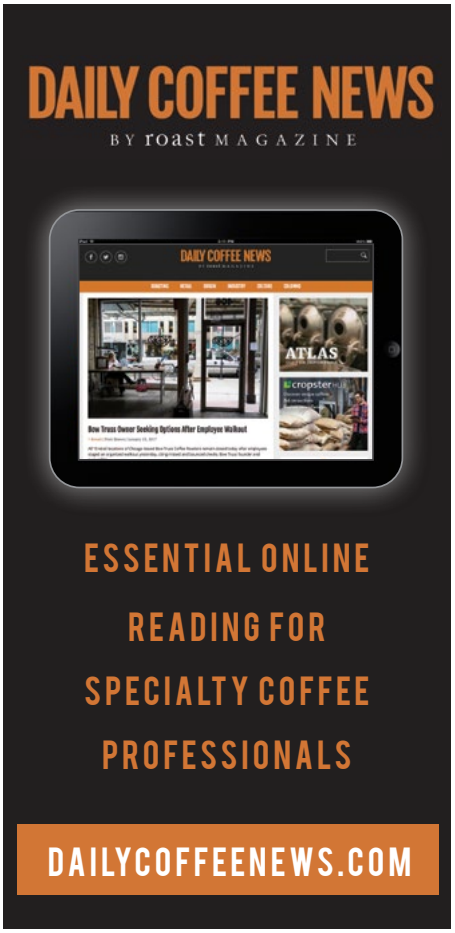
The stages of coffee production. *Photo courtesy of Mountain Harvest*

He attributes this difference to Enveritas' use of geospatial technology to give better landscape ideas about farmer life. "I'm a huge proponent and fan of information that shows coffee producer realities," he says. "We need to know more about the supply chain, but that cost can't be passed onto the producers."

Colleen Anunu, co-managing director of Gimme! Coffee and president of the SCA, says that in pursuing quality, the coffee industry must consider what the pursuit of quality means as a whole. She explains that the mindset shift for many roasters and buyers is moving from a simplistic version of what quality is to a much more complex one that asks what it means to add value and equity.

Transparency platforms like iFinca and Enveritas work to fulfill the goal of equitable access to information, but the question remains, do farmers trust the price-setters with this information? Anunu,







who is also a former director at Fair Trade USA, says, "I do know that there is a lack of trust in financial data."

Those asking the questions are in a "historic position as holding the power and being the price setter," she says, and when it comes to resistance, "I support the pushback of producers who don't want the audits." Anunu speaks highly of organizations like Fair Trade International. "Fair Trade is 100 percent informed by producer experience," she says.

When asked whether or not she thinks apps like iFinca, Farmer Connect or Beyco empower a farmer to negotiate a better price, Anunu responds, "I think so." She says that any service that helps a producer understand and analyze their data and allows them to use that for their own selling is absolutely necessary. Anunu sums it up by saying, "I believe it is an empowerment tool as long as it is democratized."



Coffee sorting. *Photo courtesy of Mountain Harvest*





Uganada path. *Photo courtesy of Mountain Harvest*

Along with the massive and sweeping effort to collect and share data comes an even greater responsibility: analyzing that data in a meaningful way. If data sets are left to machine learning and not carefully analyzed within the historical context of resource extraction then we may find ourselves in an even worse position, similar to when predictive policing does more to reinforce inequality than to address it. The interpretation of the data being collected has to be measured against a shared set of ethics. Goals to end poverty, and create equitable value distribution and sustainability must align with those ethics of interpretation before we can evaluate the ethical or unethical efforts being made by transparency providers. To illustrate how data interpretation can be measured against the ethical principles of fairness and autonomy, Anunu shares the following:

Fair Trade International is currently collecting data on living wages and living income in nearly a dozen coffee-producing countries. This data, paired with prices paid, should give us a more complete picture of how to make a more equitable and sustainable supply chain, in theory. In 2018, Fair Trade International released data on a similar analysis of cocoa farmers in West Africa. Data showed that the prices paid versus living wages of each country left an enormous gap—a gap so wide that if prices adjusted too much, the farmers would be priced out of the market entirely.

Producers ultimately decided to make adjustments that would increase equity but not price them out of the market. Even so, we must ask ourselves, is this enough? Once more data is available in the coffee industry, who will be at the table to analyze the data and whom will those analyses serve? How can this industry move toward more equitable distribution of not only finance but also ownership?

Part two of this series will aim to answer some of these questions with examples of existing equity models and best practices by specialty coffee organizations. The article will explore the ways in which Enveritas adopted its ethical standards and how those standards align with its goal to end poverty in the coffee sector by 2030. We'll also take a look at the georeferencing and mapping program launched in Mexico in 2019 by Cesmach Cooperative, which collects its own data from members to create sustainable development, and works to answer the question of producer equity and ownership by exploring existing and planned models that offer producers shares of roasting or importing businesses. Finally, we'll explore Fair Trade International's living wage research among coffee farmers and uncover how the analysis of that data will empower farmers to make autonomous decisions toward a sustainable future.

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