BUSINESS CALL TO ACTION

Vava Coffee

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1. Introduction

This case study details social enterprise Vava Coffee's experience with social impact measurement through the BCtA Impact Measurement Services (BIMS). It begins with an explanation of Vava's core business model and social mission, followed by an assessment of its business activities and potential contribution to social outcomes. The study then details the 'BIMS process' Vava engaged in to develop a social impact measurement framework and integrate social impact data collection into its operations. The preliminary data analysis shows the roadmap for Vava to improve its impact in the long run. The study concludes by highlighting the lessons learned through BIMS' engagement with Vava, which can benefit the broader inclusive business community.

This publication is part of a series of case studies on the BCtA *Impact Measurement Services* (BIMS), a *Business Call to Action* (BCtA) initiative that demonstrates how inclusive businesses can measure and apply social impact data.

Twenty one of BCtA's members are BIMS participants. BIMS provides them technical expertise and technology to design and implement survey-based data collection for assessing their operational and social performance. BIMS is implemented by BCtA with support from our implementing providers Arthify and Echo Mobile.

Photo courtesy of Vava Coffee.

Guiding questions for measuring impact

- Why should businesses measure social impact?
- How should they measure it?
- What kind of data should they collect?
- What should they do with this data, and how is it useful?
- How can they contribute to global priorities and commitments such as the Sustainable Development Goals (SDGs)?[1]

Inclusive businesses[2] across the world face these fundamental questions – whether they are multinational corporations, national conglomerates, or small and medium-sized enterprises.

BIMS works with select BCtA member companies to help answer these important questions.

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1   Adopted in September 2015 by all United Nations member states, the SDGs comprise 17 global goals and 169 targets concerning critical development issues. Countries are aiming to achieve them by 2030.

2   Inclusive businesses are commercially viable business ventures that engage people living at the base of the economic pyramid (BoP) as consumers, producers, suppliers and distributors of goods and services.

2. About Vava Coffee

Established in 2009, Vava Coffee works along the entire coffee value chain, sourcing small batches of premium coffee beans grown on small farms in the Nyeri and Kirinyaga Counties of Kenya's Central Province. The company estimates that of the 700,000 small coffee farmers in Kenya, it currently sources from roughly 30,000 in across the two counties and aim is to target 130,000 farmers by 2018.

In Kenya, farmers organize themselves in two ways in order to legally sell their crops: either as a member of a farmer cooperative organization or as an individual estate, which consist of anywhere from 3 to 1000 hectares. Most farmers in cooperatives on the other hand are smallholder farmers, defined by the African Development Bank as farmers who own less than two hectares of land. Cooperatives allow these smallholders to organize into several localized coffee factories, each of which aggregate coffee from several thousand surrounding farmers and transport their beans to the central cooperative. The cooperatives then take responsibility for selling the coffee and provide farmers with inputs on credit, such as fertilizer and seeds, prior to the next harvest.

Historically, Kenyan cooperatives and estate farmers have both sold their crops exclusively at auctions to large corporate vendors that buy in bulk and drive down prices. In recent years, however, the Kenyan government authorized a new method of sale known as direct trade, which allows buyers and sellers to circumvent the auction and trade directly. To do so, cooperatives and estate farmers must have a grower's license. These allow them to negotiate and sell small "microlots" directly to private buyers like Vava, in addition to selling the larger lots at auction. Vava believes that this new approach provides farmers a channel for selling some of their coffee at higher prices and thus achieving better margins by cutting out the auction in the middle, and it allows premium coffee vendors to seek out smaller lots of higher quality coffee. Thus in order to ensure fair payment to farmers and high quality product, Vava sources 85 percent of its coffee from licensed smallholder cooperatives and the remainder from licensed small estate farmers, and then distributes it both as green bulk exports and roasted coffee for the export and local markets.

3. Measuring Social Impact

Vava Coffee's social mission is to empower farming communities and establish sustainable livelihoods for Kenya's smallholder coffee farmers. The company believes that the current premium coffee value chain is inequitable. It favors buyers and consumers at the expense of producers, pinching margins and contributing to entrenched poverty. Vava seeks to counter this imbalance through direct trade, providing suppliers with better prices, consumers with better coffee, and helping scale and sustain its international premium coffee brand.

Vava's management has observed that the prevailing coffee value chain places all the risk on poor farmers. Indeed, using the Progress-Out-of-Poverty Index (PPI) for Kenya, preliminary data indicates that 64 percent of the farmers working with Vava are living below USD 8.44 per day.[3] This places them in the base of the economic pyramid (BoP).[4] Exacerbating their plight, the prevailing market system forces these farmers to take on debt to access the resources required to fertilize and grow each new crop. In order to sell their crops, farmers rely on auctions, which result in bottom-dollar wholesale prices

and delays in payments from six months up to a year after sale.

This provides consistently low prices, leaving many farmers in a perpetual state of debt. Farming families subsequently struggle to cover critical expenses such as food, education and healthcare, and have little liquidity for emergencies or investments in their farming businesses, further entrenching the cycle of poverty and insecurity. Other problems include consistently low yields of premium coffee and low levels of financial literacy.

While international efforts such as Fair Trade certification for cooperatives have been established to increase equity in the international coffee trade, Vava has observed that many farmers in cooperatives are unaware of the existence or function of the certifications. This was validated by preliminary BIMS data, which found that just 5.2 percent of respondents have any awareness of certifications.

In light of these limitations, Vava Coffee is working to break the cycle of poverty through its core business activities, educational outreach and training. To promote

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3   http://www.progressoutofpoverty.org/country/kenya

4   BCtA defines the BoP as those living on less than USD 8 in purchasing power parity per capita per day (2005 US dollars).

gender inclusion, Vava also sources its packaging from underemployed low-income women in Nairobi's informal settlements, who sew bags out of traditional African fabrics. Through a more inclusive and equitable purchasing model, Vava hopes to improve incomes for all of its suppliers while establishing a scalable and sustainable premium coffee business. Within the broader context of achieving the SDGs, the company has identified the following areas of intended impact:

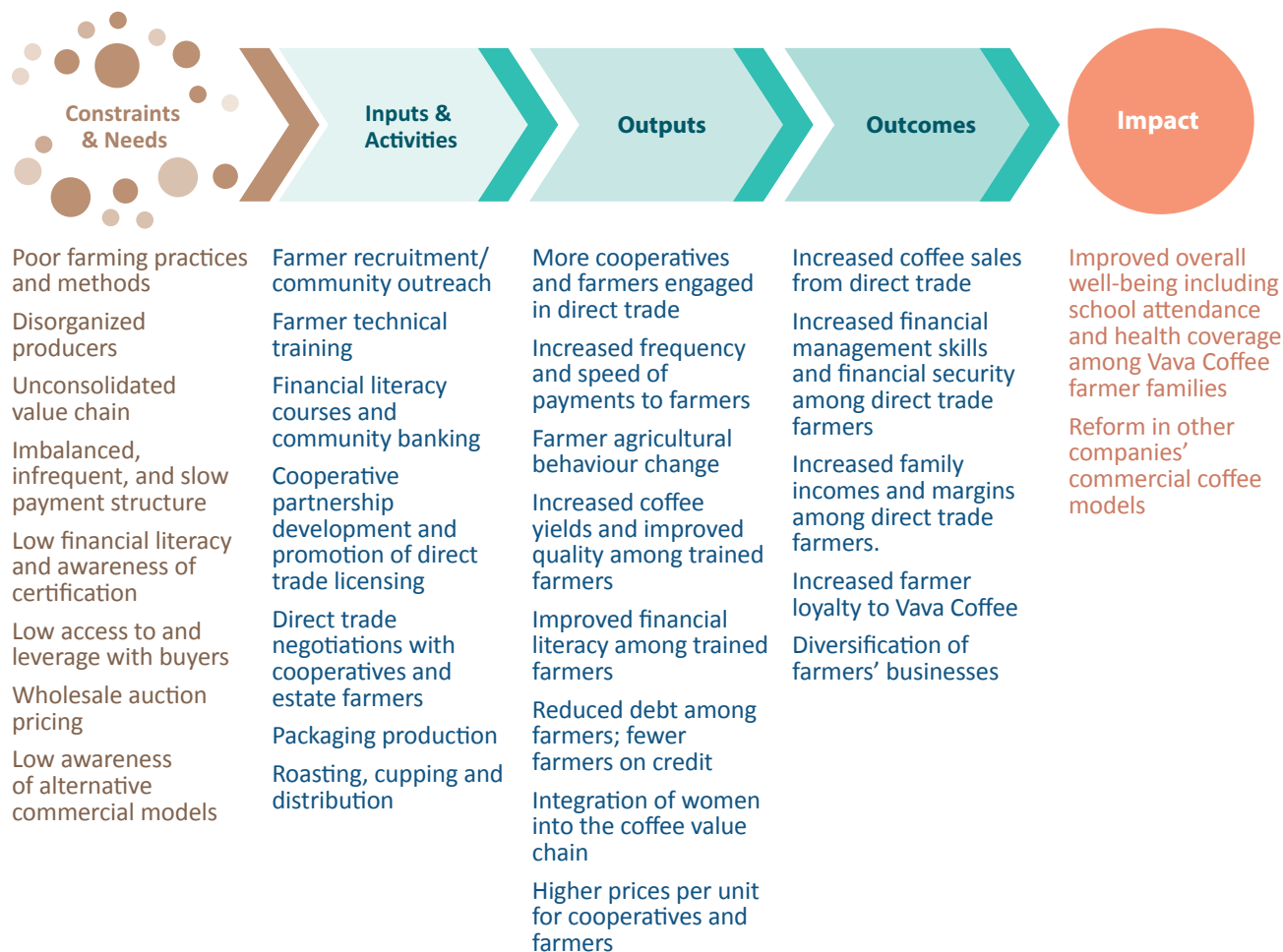| 1 NO POVERTY	2 ZERO HUNGER	3 GOOD HEALTH AND WELL-BEING	4 QUALITY EDUCATION	5 GENDER EQUALITY

With assistance from BIMS, Vava designed and deployed a digital survey to begin assessing its impact against these goals. The survey targets farmers currently engaged in direct trade with Vava through their cooperatives or small estates, as well as those interested in direct trade but whose cooperatives are not licensed. The survey seeks to provide both quantitative and qualitative evidence to validate the company's assumptions about the current system. The data will then be used to establish a baseline and track impact over time. Vava will also capture evidence of impact by tracking premium coffee sales at the auctions in order to draw direct price comparisons with its inclusive buying model.

Vava's survey design resulted from its engagement in BIMS processes, which were designed to assist companies in measuring social impact and commercial viability. The first step was to develop a **Social Value Chain**, which tracks business operations leading to intended impact. The Social Value Chain is an analytic framework combining Theory of Change[5], logframes[6] and Value Chain Analysis[7] that helps companies to strategically assess their social objectives.

Vava Coffee's Social Value Chain was designed to assess the company's impact on farmer incomes and livelihoods, as well as the broader coffee market system in Kenya.

Figure 1. Vava Coffee's Social Value Chain

Constraints & Needs	Inputs & Activities	Outputs	Outcomes	Impact
Poor farming practices and methods	Farmer recruitment/ community outreach	More cooperatives and farmers engaged in direct trade	Increased coffee sales from direct trade	Improved overall well-being including school attendance and health coverage among Vava Coffee farmer families
Disorganized producers	Farmer technical training	Increased frequency and speed of payments to farmers	Increased financial management skills and financial security among direct trade farmers	Reform in other companies' commercial coffee models
Unconsolidated value chain	Financial literacy courses and community banking	Farmer agricultural behaviour change	Increased family incomes and margins among direct trade farmers.	
Imbalanced, infrequent, and slow payment structure	Cooperative partnership development and promotion of direct trade licensing	Increased coffee yields and improved quality among trained farmers	Increased farmer loyalty to Vava Coffee	
Low financial literacy and awareness of certification	Direct trade negotiations with cooperatives and estate farmers	Improved financial literacy among trained farmers	Diversification of farmers' businesses	
Low access to and leverage with buyers	Packaging production	Reduced debt among farmers; fewer farmers on credit		
Wholesale auction pricing	Roasting, cupping and distribution	Integration of women into the coffee value chain		
Low awareness of alternative commercial models		Higher prices per unit for cooperatives and farmers		

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5   http://www.theoryofchange.org

6   http://www.adb.org/documents/using-logical-framework-sector-analysis-and-project-design-users-guide

7   Porter, M. E. 1998. Competitive Advantage: Creating and Sustaining Superior Performance. New York: Free Press.

The Social Value Chain helps companies to articulate the social objectives they seek to achieve, and to identify the inputs, activities and results that help them to meet those objectives. These parameters are then transformed into indicators that can: (i) be measured; and (ii) inform decision making to improve the company's social impact.

Figure 2. Vava Coffee's Indicators

Social Value Chain component	Parameters	Indicators	Decision-making questions
Inputs & activities	Growth and scale	# of farmers and cooperatives sourced from	Is the business and social concept scaleable and marketable to producers?
	Reach	# of farmers educated in financial management	Is there demand for financial education among farmers?
Outputs (operational)	Cultivation	# of farmers employing improved earth-friendly input use	Are Vava farmers finding value in and applying technical training?
	Farmer financial and business literacy	# of farmers using financial ledgers	Are Vava farmers finding value in and applying financial training?
		# farmers aware of direct trade licensing	Is Vava's direct trade business model recognized by farmers?
	Income	# farmers with debt	Is Vava's model helping farmers to reduce their debt and reinvest in their businesses relative to alternative systems?
	Gender inclusion	# of women employed in coffee roasting & management positions	Can women be more inclusively integrated into the coffee value chain?
Outcomes	Sales	Total sales volume	Can Vava's inclusive approach be used to drive premium coffee sales and achieve sustainability?
	Farmer financial security	Coffee purchase price	Can Vava's inclusive approach increase farmers' wages and incomes?
	Farmer loyalty	Duration and consistency of direct trade with cooperatives	Does the Vava approach generate loyalty among farmer cooperatives and recognition among farmers as distinct from competitors' systems?
	Productivity	Volume/yield by farm	Does Vava's technical training increase productivity among farmers and therefore increase the yields available for direct trade?
	Quality	Quality of coffee by farmer/harvest	
Impact	Educational impact	School attendance rates among farming families in the value chain	Do farming families engaged in direct trade with Vava have better or more frequent opportunities for education?
	Health impact	# of farming families registered for health care coverage	Do farming families engaged in direct trade with Vava have better health care coverage or are they more likely to be covered?
	Livelihoods impact	Amount of land owned by average or all supplier farmers	Are farming families engaged in direct trade with Vava more likely to increase their farming assets?
	Industry impact	# of total Kenyan coffee farmers and cooperatives engaged in direct trade	Does the inclusive direct trade model proliferate based on Vava's example – both with new farmers and new buyers?

4. Implementing BCtA Impact Measurement Services (BIMS)

BIMS engages participating companies in planning and implementing social impact measurement through a three-step process over a two-year period. The first six months are focused on developing the social value chain, impact measurement indicators and survey tools, as well as technology transfer, training, and capacity building. The rest of the time is dedicated to data collection.

Articulating the context and rationale for measuring social impact

This phase requires companies to take a macro view of their businesses, the expected returns, the maturity of their activities, and the purpose of measuring impact (see Figure 3) to articulate their expectation and needs for measuring impact.

Vava Coffee articulated these parameters as follows:

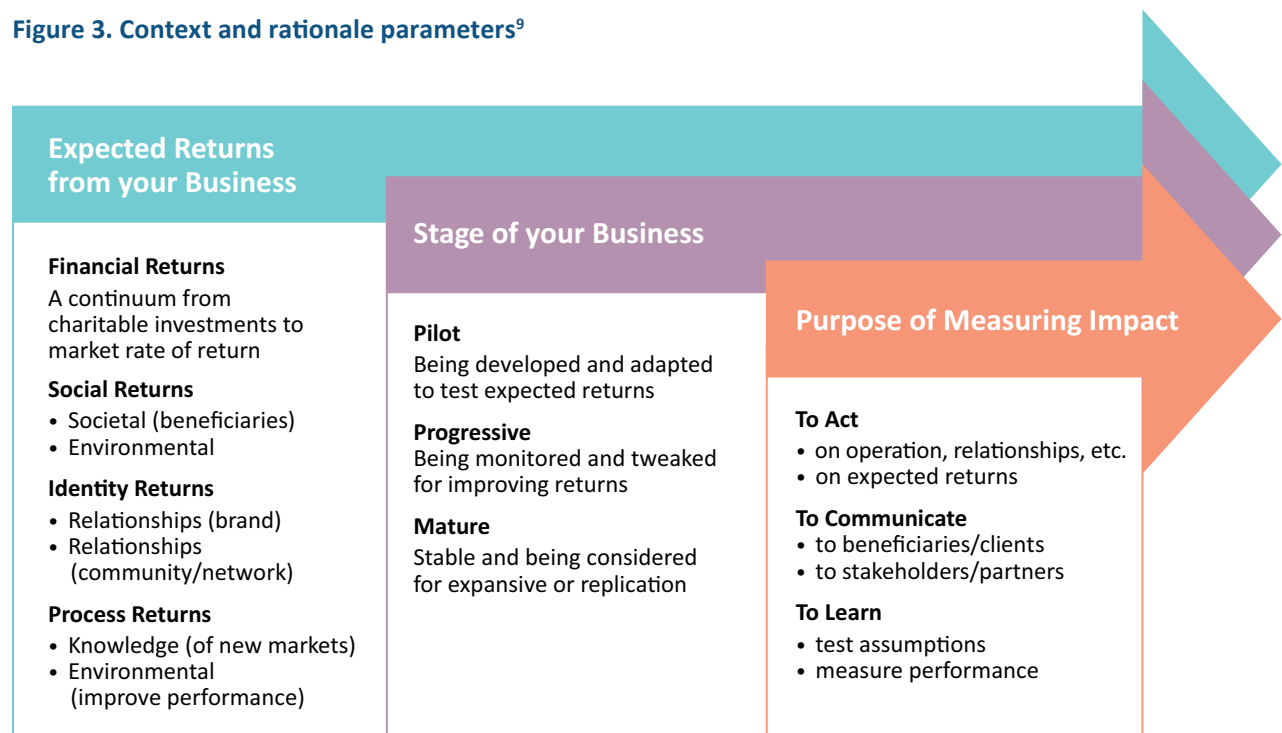1. **Expected returns:** Vava Coffee defines itself as a social enterprise, and therefore has a responsibility to farmers, funders and supporters to show both financial sustainability and social impact on farmer livelihoods.

2. **Stage of growth:** Vava has operated for seven years, reached 30,000 farmers, and achieved sales in the international and domestic markets. It is in the progressive stage however, continuing to seek financial stability and develop a consistent direct trade supply chain.

3. **Purpose for impact measurement:** Vava's focus is communications. The company is courting new buyers, investors and funders, for which it seeks to validate its inclusive business model and justify its premium pricing. The company is also seeking investment to enable experimentation with pre-harvest purchasing, in which it advances 30 percent of the cost of purchase before production, sharing the risk with farmers.

Developing the Social Value Chain

The next phase of the BIMS process requires inputs from the company – especially from the staff who

Figure 3. Context and rationale parameters[9]

Expected Returns from your Business

Financial Returns
A continuum from charitable investments to market rate of return

Social Returns
• Societal (beneficiaries)
• Environmental

Identity Returns
• Relationships (brand)
• Relationships (community/network)

Process Returns
• Knowledge (of new markets)
• Environmental (improve performance)

Stage of your Business

Pilot
Being developed and adapted to test expected returns

Progressive
Being monitored and tweaked for improving returns

Mature
Stable and being considered for expansive or replication

Purpose of Measuring Impact

To Act
• on operation, relationships, etc.
• on expected returns

To Communicate
• to beneficiaries/clients
• to stakeholders/partners

To Learn
• test assumptions
• measure performance

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8   Based on: Epstein M.J. & Yuthas, K. 2014. Measuring and Improving Social Impacts: A Guide for Nonprofits, Companies and Impact Investors. San Francisco: Berrett-Koehler Publishers, Inc.

regularly interact with farmers. Staff engage in an ongoing discussion with BIMS, formulating answers to the following questions:

1. What is the business' social vision/goal?

2. What social needs is the business trying to address (the problem statement)?

3. What social and market constraints does the business work within and seek to change?

4. What activities and resources (inputs) does the business deploy? How do these activities impact the constraints?

5. What are the indicators of success and timelines for assessing impact?

Vava Coffee's social value chain was developed over four months by the company's founder, working directly with the BIMS team. Milestones included the creation of a results chain map and a logical framework (logframe) to map intended outputs, outcomes and impact against quantifiable indicators. This led to at an onsite workshop with staff to discuss these issues, review the logframe and develop a comprehensive understanding of the company's impact.

Designing and implementing technology-enabled data collection

In this phase, Vava Coffee prepared to integrate impact data collection into its business activities to capture key indicators. Following the workshop, field staff and management used the indicators to design survey questions.

As the surveys were refined, Vava brought on a team of field agents who were trained in using a mobile data-collection application on Android tablets. At the same time, Vava's founder was trained to use an off-the-shelf web platform to digitize and deploy the surveys to the field agents' tablets, and to retrieve the aggregated data they collected for analysis.

Finally, BIMS guided Vava through field testing the survey tools, hardware, and web and mobile software, integrating the capacity-building exercises completed during the Social Value Chain and survey development processes with technical training and hardware distribution. Ultimately, the company developed two data collection tools: an in-person farmer survey and an observational auction tracking form.

Vava Coffee survey implementation

The population:

Vava Coffee purchases coffee beans from 30,000 smallholder farmers in Kirinyaga and Nyeri Counties in Kenya's Central Province.

Optimal survey methodology:

Because of varying location, land ownership and cooperative membership, the optimal methodology would be for Vava to stratify the farmer surveys by cooperative, location, those engaged in direct trade with Vava, and those selling at auction. Cooperative membership could also be disaggregated so that baseline data could be compared to identify variations and similarities within and across cooperatives. If significant variations existed, more clusters could be sampled to identify where the issue was most significant.

In order to achieve 95 percent confidence in the findings within a 5 percent margin of error, the optimal sample size would be 380 of the 30,000 producers.

Actual implemented survey method:

Limited human and transportation resources required Vava to integrate data collection into existing contacts with farmers, based on business strategy and harvest schedules. The data collection from farmers was largely opportunistic. While the company was still able to achieve the optimum sample size, resource limitations meant that twice as much time was required. The original target was to achieve a representative sample each quarter by targeting 100 farmers monthly with four field agents surveying at least three farmers each day, twice weekly. Instead, the survey process required six months to pilot and refine.

5. Improving Social Impact: Data for Decisions

BIMS enables participating companies to go beyond reporting and apply social impact data in decision making. To ensure that the survey tools, data, and lessons learned by each company benefit the larger inclusive business community, BIMS has defined four common questions for participating companies:

Who are the beneficiaries of Vava Coffee's inclusive business?

Vava Coffee's primary beneficiaries are smallholder coffee farmers in Kirinyaga and Nyeri County. To understand this group better, the survey included questions from the PPI and others on direct trade and financial practices in order to validate assumptions about poverty, livelihoods, and business models.

Beyond the farmers themselves, Vava seeks to impact families. The farmer survey also included questions about children's education and health and sought to identify gender-based trends.

Vava strives for a greater gender balance and partcipation in the value chain of an industry that has high participation but a low level of leadership among women. Preliminary data has established a baseline for impact as the company seeks to expand its direct trade supplier base. According to the PPI data, 64 percent of farmers associated with Vava are living below USD 8.44 per day, with household size averaging six people. All the farmers are also cultivating other crops to support their irregular coffee income stream. The gender imbalance in the industry was not as stark as originally expected, with under 70 percent reporting women engaged at the cooperative management level.

What aspects of customers' lives are being impacted by the company?

In line with SDGs 1 and 2, Vava aims to impact farmers' yields and incomes. The survey found that the average annual coffee revenue was KSH 38,000 per household (USD 380). Yields ranged from 40 kg to 300 kg per year, with an average yield of 70 kg. Land ownership proved to be a critical limitation on yields and income, with the majority of farmers reporting land ownership of only half an acre and only 31 percent reporting ownership

of more than 1 acre. Over 80 percent of respondents reported an alternative sources of revenue due to low coffee returns, including cultivation of other crops and part-time employment. Whether Vava is able to improve the reliability and profitability of coffee cultivation over time will be tracked via continued data collection.

It is also unclear how much Vava has impacted SDGs 3 and 4, but there is room for impact on both. Just under half of all farmers surveyed have health coverage through Kenya's National Hospital Insurance Fund (NHIF). 47 percent have children in primary school, while 53 percent have children who have completed secondary school or higher. In terms of SDG 5, women's participation in farming and cooperative management is common, suggesting that direct trade may have less of an impact on gender equality than initially presumed.

How is Vava Coffee achieving this impact?

Without longitudinal data, no conclusions can be drawn yet, but the working assumption is that direct trade will contribute to improving farming families' income, which will further improve their overall well-being. The continuous engagement with women farmers will contribute to the gender equality. These impacts will be reinforced by Vava's training initiatives, which are designed to improve coffee quality and yields.

Can Vava Coffee increase its impact?

Awareness of the Vava's alternative buying model was extremely low. Although nearly 40 percent of the farmers surveyed work with cooperative factories that engage in direct trade with Vava, only 5.2 percent of them were aware of the difference between direct trade and auction sales. While some of their coffee may have been sold to Vava via direct trade, providing them with higher prices, they were not aware of this distinction between the two sales channels, perhaps suggesting that the impact has not yet been felt. Conclusions about Vava's impact on livelihoods will be difficult to draw until at least one year's harvest and related transactions have taken place. The company will then be able to conduct a comparative analysis between the prices received by farmers through their cooperatives' direct-trade with Vava and those received from sales at auction.

6. Lessons Learned and Next Steps

Data collection demands resources

As a social enterprise seeking investment and sustainability, Vava Coffee is lean. Upon engaging with BIMS, the company had just five full-time staff, including its Nairobi-based founder and owner. Before BIMS training, Vava's owner was hesitant to take full-time staff away from daily operations. To facilitate in-person surveying of farmers on mobile devices, the company supplemented its human resources by recruiting seven short-term staff to test the surveys and establish data-collection and management processes.

When engaging in data collection, inclusive businesses should carefully project the human and financial resources that will be required – even when employing mobile technology.

Respondent distribution may require different mobile channels

Demands on human and financial resources were heightened by the distribution of respondents across a large geographic area. Despite the use of mobile devices for data collection, sending people to the field to collect the data dramatically increased transport costs. This outcome suggests that inclusive businesses should consider different types of mobile data collection channels depending on the operational context. While in-person surveys generated positive interactions with suppliers, provided opportunities for education and branding, and exposed operational inefficiencies, other data collection channels such as SMS and interactive voice response might have been cheaper and more efficient. Ideally, multi-channel approaches should be considered, with different types of data collection instruments used depending on the data needed.

The process of data collection has secondary operational benefits

While the data collection process requires companies to invest their time and human resources, Vava views this as a net benefit. According to the founder and owner, "It helped me understand my farmer profile better and things that we can improve on as a company – not just our impact. If you don't have the resources to go around talking to farmers one-on-one, which is what we realized, then it's a constraint because you only access the people at the top of the cooperatives. BIMS data collection brings us to farmers on a continuous basis. We're slowly catching up with them after a long time of not talking to them in-depth."

While the company has always sought to improve efficiencies and processes, BIMS made certain inefficiencies more evident, helping to improve the overall corporate structure – even while costing the company in the short term. With these insights, Vava is relocating closer to its suppliers to sustain farmer engagement and considering establishing roasting and milling operations.

Re-staffing has also had secondary benefits for the company, serving as 'an extended interview' process for new staff. After several months of collecting data, four short-term staff members have received full-time offers to support sales, marketing, field logistics, data management and analysis. Vava's owner sees this team a new department working "to tell our story and get investment to support our work. If you say you're a social enterprise to investors, the question is always 'how are you measuring and showing impact? Are you achieving what you want to achieve? Are farmers themselves reporting benefit? How are you measuring?' Now we're able to answer those questions."