



Photo: Cocoa plantation. Adobe stock

Humanising value chains through the power of digital innovation

At the CFC we are continually searching for effective ways to improve the lives of smallholder farmers, this includes supporting digital innovation that enables them to earn more from the commodities they grow and/or services they provide.

We believe digitising value chains has huge potential to address some of the stubborn challenges that smallholders continue to face, by connecting them to the growing conscious consumer market.

A commodity value chain encompasses the journey from farmer to consumer, including processors, traders and retailers. At each stage value is added until it reaches the consumer. Innovation can play its part in humanising value chains, so they prioritise the wellbeing of every person involved from production to consumption. This includes treating workers fairly, promoting diversity and inclusion, minimising environmental impact and, critically, enabling smallholder farmers to retain more of the value created along this journey.

It's vital we take decisive steps towards humanising value chains so that smallholder farmers can overcome barriers to prosperity. Economic, political and climate-related disruption in recent years have highlighted just how vulnerable smallholders are to price volatility. In addition, there continues to be a huge disparity between the farm gate price farmers receive and the final price of the products their commodities make.

This is true across numerous commodities, but I have picked out three sectors in which the issue is particularly severe and where digital innovation could make a difference.

Cocoa

Chocolate is a huge industry and a profitable one for many brands. Cocoa recently hit highs of more than 12,000 USD per metric ton¹ on the New York exchange, which is 12 USD per kilo. But it's not so lucrative for farmers in Ghana or Côte d'Ivoire who earn around 2.50 USD per kilo for their cocoa beans.

¹ <https://tradingeconomics.com/commodity/cocoa> (accessed on April 28, 2024)

A study by the Wageningen University & Research (WUR)² and Mondelez International also showed that nearly 75% of small-holder cocoa farmers in Ghana and Côte d'Ivoire do not earn a living income. One third of those farmers are not expected to overcome poverty without support. The study suggests additional income of around 10 billion USD per year is required for all farmers to earn a living income. This amount is more than three times the total 2018 cocoa export earnings for Ghana and Côte d'Ivoire.

Coffee

The livelihoods of twenty-five million households depend on the production of coffee. It is a global drink that influences the economic and cultural histories of so many countries. But few consumers understand how it is produced and the lack of fairness in the process. From a 2.50 GBP latte in a London café, just one penny³ gets back to coffee farmers.

On a national level, this has profound consequences. The Financial Times reported⁴ that producing countries retain less than 10 per cent of the retail value of coffee, in an industry

valued at between 200bn USD and 500bn USD annually! According to the World Intellectual Property Organization most of that value is retained by big businesses in the global north. The same applies to commodities such as tea, cashew, sesame and macadamia.

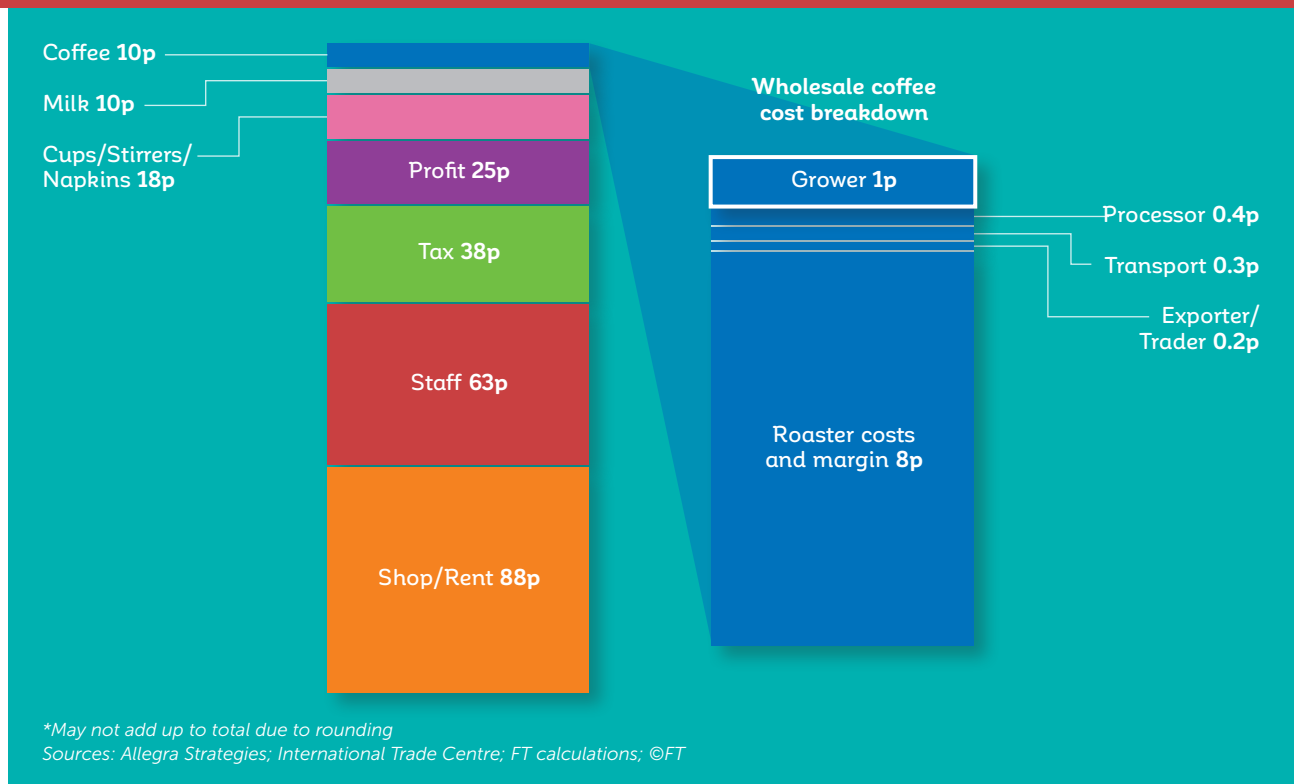
Clothes

The situation doesn't improve as you move from raw commodities to semi-processed ones. Take the case of garment workers, who struggle on extremely low wages. It's easy to blame the owners of the factories they work in, but we need to look at the entire value chain from the fashion brands to the textile workers and cotton farmers.

In an industry that generates 2.5tn USD it should be possible to provide a living income for everyone in the value chain. It takes the average CEO of a fashion business just 28 minutes to amass the amount a Bangladeshi garment worker earns on average in a year⁵, that's why we need to turn to boardrooms in London, Paris, Rome and New York for solutions first.

Farmers get a fraction of the money you spend on your morning coffee⁵

Cost breakdown for a £2.5 cup of coffee⁶



² Living income in cocoa – WUR. (<https://www.wur.nl/en/newsarticle/living-income-in-cocoa.htm>) (Accessed on 07, 2022)

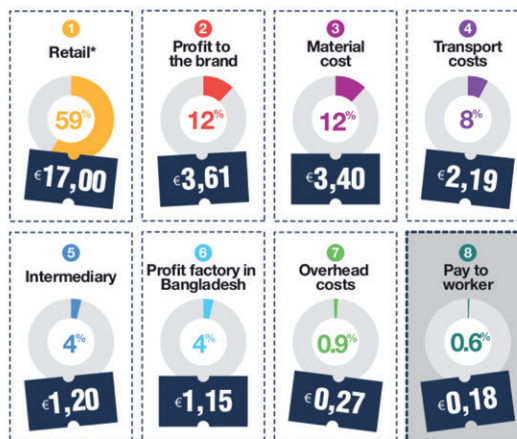
³ From bean to cup, what goes into the cost of your coffee? | Financial Times (ft.com) (Accessed on June 06, 2022)

⁴ Have we reached peak coffee? The Financial Times, 17 August 2023. (Accessed on September 17, 2023)

⁵ From bean to cup, what goes into the cost of your coffee? | Financial Times (ft.com) (Accessed on June 06, 2022)

⁶ <https://tansyhoskins.org/bangladesh/> (accessed on 17 February 2024)

Breakdown of costs of a t-shirt



* Includes all costs at a retail level including staff, rent, store profit, VAT etc.

Source: Clean Cloth Campaigns

Empowering consumers and smallholders with technology

Reducing these kinds of disparities is central to our work. As I noted above, one way to achieve this is by humanising value chains – connecting consumers with the people who work hard to produce the chocolate bars, lattes and t-shirts they take for granted. Increasingly consumers want to buy products that are produced sustainably from both an environmental and social perspective, this includes paying people fairly.

Rapidly developing technologies such as blockchain and AI have a key part to play by channeling more of the money we pay for products and services to reach smallholder farmers and workers. Digital traceability tools equip consumers with knowledge about the origins of products, who made them and how. The same technology could also give consumers the option to tip farmers, just as they tip delivery workers, cab drivers and waiters⁷.

Clear guardrails need to be set to ensure the money reaches farmers and support provided to help them manage it effectively and safely. If harnessed effectively, technology has the power to create an emotional and financial connection between consumers and farmers on different sides of the world, enabling consumers to invest directly in boosting the livelihoods of impoverished smallholders.

Leading brands have a crucial role. By adopting technological advances and prioritising the farmers they rely on, they can provide value-chain insights to consumers while protecting farmers from the whims of the market.

Farmers are in a uniquely vulnerable position in the value chain. They do not determine the price of their goods and have little power to adjust it if their costs of production rise or their harvest falters. Conversely, if a trader suddenly increases their wholesale price, the retailer has the option to raise menu or item prices. If a brand is told by their importer to expect a cost increase, the brand has the option to raise prices for their wholesale customers.

Alongside providing traceability and value chain insights for brands, smart tools can help farmers minimise costs, enhance production processes, predict yields and prepare for approaching challenges, which also strengthens their position when it comes to negotiating prices.

We are at a pivotal moment, as advancing tech capabilities converge with an increasingly influential conscious consumer market. Bringing these elements together has the potential to unlock significant benefits for smallholder farmers and workers.

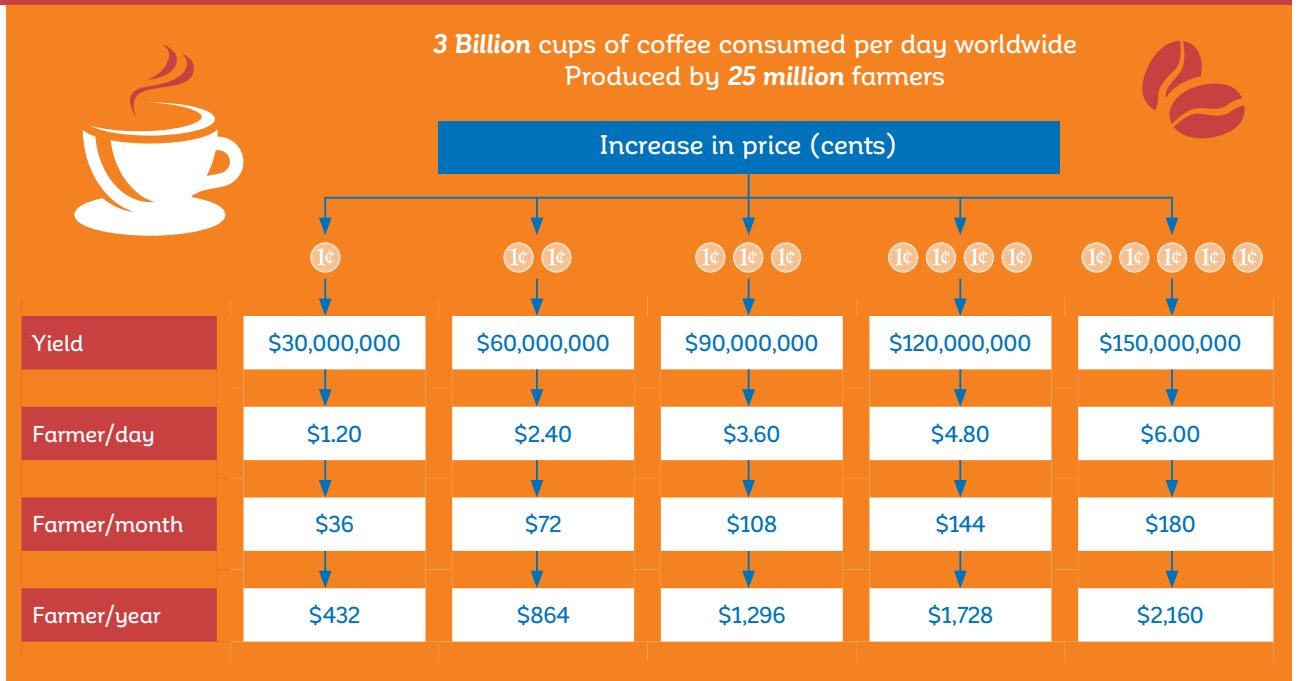
For more ethically-minded younger generations, habits such as digital tipping are already a part of life, extending this to farmers/workers in an accountable and transparent way isn't a huge leap for them. The financial firepower of millennials and gen Z is also set to grow substantially⁸ as baby boomer wealth is passed on, which means they'll have greater resources to contribute to ethical and sustainable value chains.

Beyond the financial benefits for smallholders, technology also supports human connections. When consumers can see who is

⁷ In the US food industry alone, Azar (2011) estimates that annual tips reach \$47 billion. The Treasury Inspector for Tax Administration (2018) estimated a total of \$44 billion of individual tip income in 2006 in the United States (including unreported tips, and not only in the food industry). Ref: The Economics of Tipping by Ofer H. Azar, Journal of Economic Perspectives, Vol.34, No.2, Spring 2020. (pp.215-36).

⁸ Boomers, Gen X, Gen Y, Gen Z, and Gen A explained By Kasasa | 07/06/2021 (<https://www.kasasa.com/exchange/articles/generations/gen-x-gen-y-gen-z>) (Accessed on 07 June 2022)

Humanizing Coffee value chain using Innovations



toiling to grow the crops that go into their morning coffees and afternoon snacks, they are more likely to make buying decisions and support initiatives that benefit those people.

It is vital these technologies and habits are embedded now, as the intelligence revolution accelerates and the potential of generative AI to transform economies begins to be realised. If smallholders are left behind, as they so often are, inequality will grow rather than recede. However, if innovation is truly shaped around their needs, we can create a fairer, more balanced system in which all sides win.

Small steps, big impact

As an example of the positive impact tech could have on smallholder incomes, I want to turn back to coffee. As I mentioned earlier, there are around 25 million coffee farming households, many farmers exist on less than 2 USD a day according to Fairtrade.

Yet every day the world drinks about three billion cups of coffee. This is an imbalance we need to correct. If each consumer paid just one cent extra, in the form of a digital thank you to those who grew the beans that made the coffee, we could generate 30 mil-

lion USD per day for smallholders. Split between 25 million smallholder households, it would bring in \$1.20 per day, \$36 per month or \$432 per year. That's enough to lift many above the poverty line.

This is a simple example that is, perhaps, easier said than done, but it shows the potential to radically improve lives by linking consumers to farmers using digital innovation. It's an approach that can also play its part in driving solutions to the climate crisis and addressing social injustices, by creating connected, global movements for change.

In an uncertain and unstable world, it is critical that business and society work together to 'do well by doing good'. We are constantly seeking to collaborate with innovative businesses and entities that can help smallholders access the benefits of technology, so we can humanise value chains and build a more prosperous future for all. At a time, when new generation of conscious consumers are not only willing, indeed eager, to 'do well by doing good', the idea of humanizing the value chains is worth your serious consideration.

To discuss how we could work together, contact us on managing.director@common-fund.org

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