

Global Market Report: Coffee

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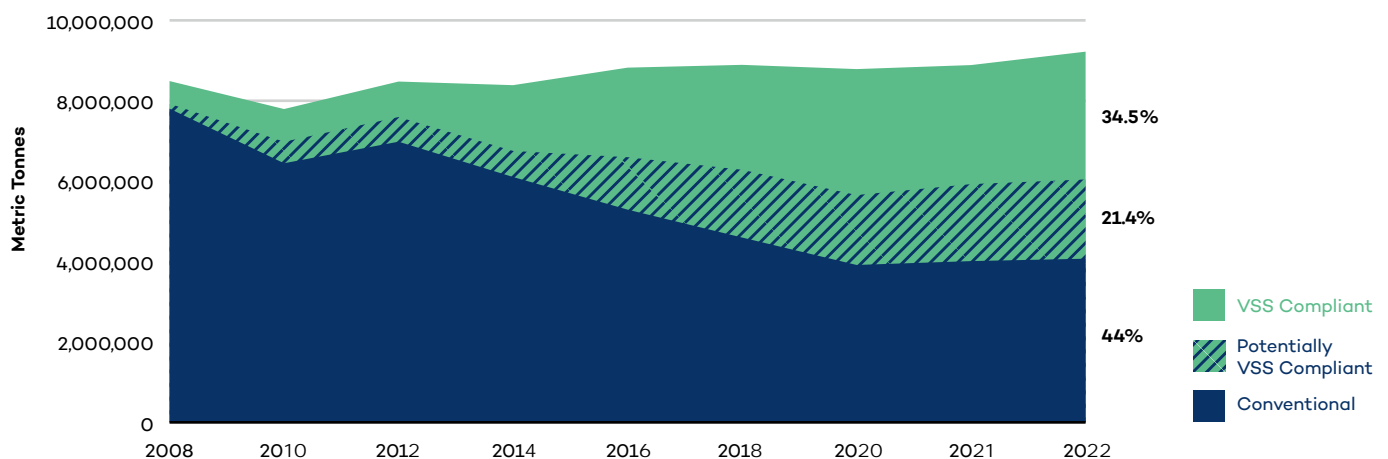
Demand for coffee is expected to grow, but low farm profitability may hurt supply.

Coffee is one of the most traded agricultural commodities in the world: in 2022 alone, 70 per cent of total coffee production was exported, worth USD 19 billion.^{1,2} That same year, the sector had a retail market value of USD 83 billion, providing jobs for 125 million people.^{1,3} Coffee is grown on 12.5 million farms worldwide, of which 67–80 per cent are smallholder farms primarily located in developing countries, including 22 Low Human Development Countries (LHDCs).^{4,5} The largest producing and exporting countries in 2022, irrespective of human development level, were Brazil (USD 4.6 billion), Vietnam (USD 3.5 billion) and Colombia (USD 2.58 billion), while the largest importing countries in 2022 were the United States (USD 6.3 billion), Germany (USD 3.5 billion) and France (USD 2.8 billion).⁶ Overall, coffee supply growth outpaced demand

growth from 2016 to 2022, at rates of 5 per cent versus 2 per cent respectively, resulting in a global coffee surplus of around 250,000 metric tonnes. The global supply–demand balance of coffee varies from year to year: 2016 closed with a supply deficit, while a surplus is estimated for 2021.² The sector is projected to grow, fuelled by increasing demand from producing countries and emerging economies that have not traditionally been among the major coffee importers, such as Brazil, Indonesia and China, as well as the expansion of retail options and coffee-based products such as ready-to-drink products.^{7,8} Another notable development is the increased adoption of voluntary sustainability standards (VSSs) by coffee producers: in 2022, 34.5 per cent of the market was made up of VSS-compliant coffee, while coffee that was potentially VSS-compliant represented 21.4 per cent, and conventional coffee production accounted for 44 per cent of the market.

VSS-Compliant Coffee Accounted for at Least 34 Per Cent of Total Coffee Production in 2016

Figure 1. Global coffee production trend 2008–2022⁹



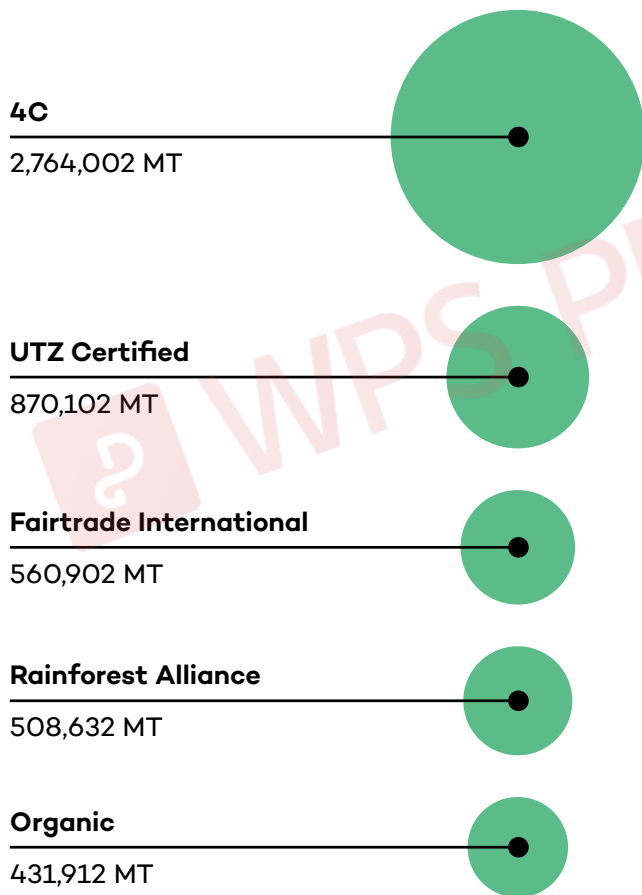
Note: Conventional production volumes do not comply with a VSS, while VSS-compliant production volumes refer to coffee produced in compliance with one or more VSSs. Production volumes that are defined as potentially VSS-compliant cannot be definitively identified as conventional or VSS-compliant with the data currently available.

The market advisory firm Mordor Intelligence predicts that the global market (retail) value of the coffee sector will experience a 5.5 per cent compound annual growth rate (CAGR) from 2018 to 2023, yet this positive outlook must be viewed against the coffee sector's history of price volatility across multiple decades and long-term price decline.⁷ Traditionally, farm gate prices have struggled to keep pace with production costs, which hurts farm profitability and makes it difficult for coffee farmers to make long-term decisions on investments and planting, ultimately disincentivizing many of them from staying in the sector.^{4,7} Increasing the volume of coffee production, regardless of

whether this coffee is VSS-compliant, to meet the projected growth in demand from non-traditional coffee importers is further challenged by the effects of a changing climate, as land suitable for coffee cultivation will be subject to more unpredictable weather patterns, with negative implications for coffee yields. These climate change risks are not limited just to extreme weather events: there are already cases where coffee-producing countries have faced severe pest and disease outbreaks, such as coffee rust, that have decimated their crops and further exacerbated the volatility of the global coffee market.⁴

How Much Coffee is Certified by Each Standard?

Figure 2. Standard-compliant coffee production volumes in 2022⁹



Consumption of more sustainable coffee supports the growth of VSS-compliant production, which can help address environmental and social development challenges.

VSSs emerged in the coffee sector over 30 years ago, with non-governmental organizations, private sector actors and other industry stakeholders looking to provide roasters, retailers and consumers with the ability to distinguish between conventionally produced coffee and its more sustainable coffee equivalent. The latter options would be produced in a way that was conscious of emissions, biodiversity conservation, and worker health and safety considerations throughout the value chain, while also aiming to provide larger economic gains for producers. Being able to associate a particular coffee brand with a socially and environmentally sound reputation through certification was meant to stimulate demand from coffee sourcing companies and end consumers for this type of product. This would in turn drive greater investment into more sustainable production practices, and the corresponding training and support that farmers would need to change their production techniques and approaches, thus boosting the supply of VSS-compliant coffee.

To date, there are some promising signs of VSSs' success on the supply side, particularly in recent years: VSS-compliant coffee experienced a CAGR of about 24 per cent from 2008 to 2016, accounting for at least 34 per cent of coffee production overall. 4C, UTZ Certified, Rainforest Alliance, Fairtrade and Organic are the main VSSs in the coffee sector, when ranked by production size. In 2016, at least 3 million metric tonnes were VSS-compliant, with coffee valued at USD 7.2 billion. This value is derived from the average producer prices per country, as reported by the Food and Agriculture Organization of the United Nations (FAO), which is then applied to the volume of VSS-compliant coffee produced per country.^{9,10} The majority of VSS-compliant production, at approximately 70 per cent, comes from Latin America (Brazil, Colombia and Peru) with some important volumes coming from Asia (Vietnam and Indonesia) and Africa (Ethiopia, Tanzania and Uganda).^{9,11}

LIVELIHOODS

Over 125 million jobs in the coffee sector
 12.5 million growing farms
 67%-80% smallholder farms

On the demand side, the results have been mixed. The 10 largest coffee roasting companies purchased 3.31 million metric tonnes of coffee in 2016, accounting for 35 per cent of total global coffee sourcing. From this total, 1.14 million metric tonnes were VSS- and corporate-initiative-compliant coffee, which refers to sustainable coffee production programs established by private companies rather than by independent third parties.⁴ Examples of corporate sustainability initiatives in the coffee sector include Starbucks' CAFÉ Practices and Nestle's Nespresso AAA programs.

Based on the sourcing commitments of the 10 largest coffee roasting companies, and assessing these against current coffee sourcing information, an additional 0.3 million metric tonnes of sustainable coffee could be sourced by 2025. The leading buyers' sourcing commitments are driven mainly by final end consumer preferences to purchase more sustainable and healthy products.¹² Even though demand for VSS-compliant coffee continues to grow, because this demand is concentrated mainly in traditional markets such as Europe and the United States, it

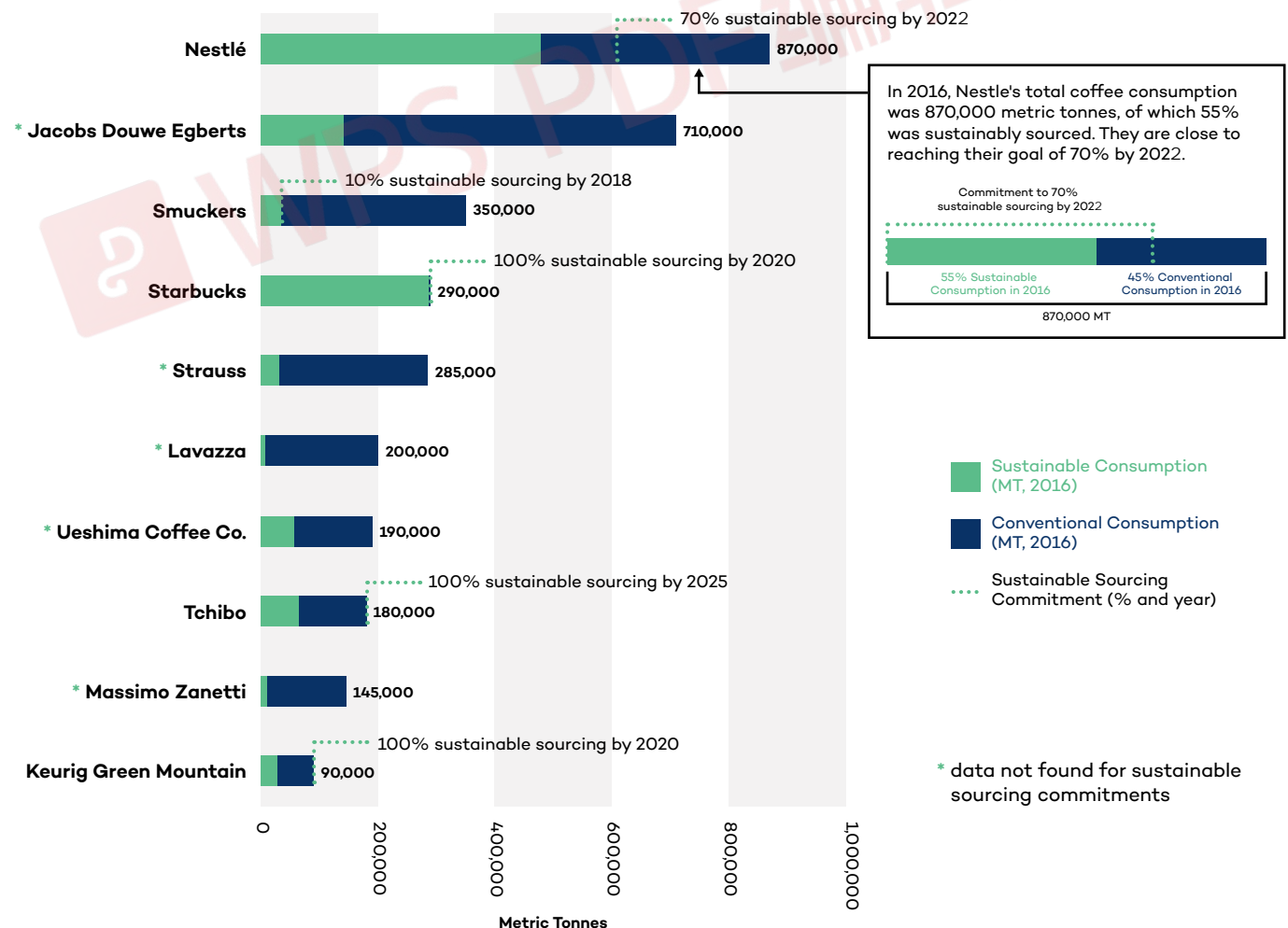
remains lower than supply.¹³ This supply–demand imbalance can limit VSS-compliant coffee's market growth potential and needs to be addressed by value chain actors to benefit from the opportunities that stem from growing coffee demand from non-traditional coffee importers. This includes higher demand from producing countries and emerging economies, especially those in Asia and Oceania.^{2,7,8}

Expanding production of sustainable coffee may require moving into less-developed growing regions.

VSS-compliant coffee and sustainable corporate initiatives are propelling the sector toward potentially becoming one of the first commodities to reach significantly high compliance with a sustainability initiative. This potential, however, must be assessed against the above-mentioned risks, such as price volatility and price decline, oversupply of VSS-compliant coffee and the effects of climate change on coffee

Good Progress Toward Sourcing More Sustainable Coffee

Figure 3. Major coffee roasting companies and their sustainable sourcing commitments^{4,14–18}



yields. Although the production of sustainable coffee is experiencing a greater growth trend than the overall sector, its continued expansion may now require moving into new markets and working with farmers that have fewer resources and less capacity than those that are already VSS-compliant. This strategy will require greater investments and innovative approaches to support farmers as they transition toward more sustainable production practices.¹¹

Another core consideration in assessing opportunities for expanding VSS compliance in the sector is the human development level of coffee-producing countries, as assessed by the Human Development Index (HDI). Out of 82 coffee-growing countries in 2016, 22 were ranked as LHDCs under the HDI, and 11 of these LHDCs produced VSS-compliant coffee. These LHDCs accounted for 12 per cent of the total coffee grown in 2016 and were responsible for 8–9 per cent of the total VSS-compliant coffee produced worldwide that same year. According to our analysis, there have been promising signs of growth in VSS-compliant production among these LHDCs: looking at the 2008–2022 time period, VSS-compliant coffee production in LHDCs increased at a CAGR of approximately 19 per cent with Organic as the VSS with the largest volume of coffee production coming from LHDCs followed by 4C and Rainforest Alliance in 2022.⁹ *The expansion of VSS-compliant coffee production in LHDCs could result in important environmental and societal development benefits via the adoption of more sustainable agricultural practices, such as lower emissions from production and the improvement of working conditions.*

Going forward, there are promising signs of VSS expansion potential among countries that are already producing significant shares of the world's coffee and have begun to adopt VSSs, including some countries that are LHDCs.

MARKET VALUE

Over 7.12 Billion USD VSS-compliant coffee based on 2016 coffee producer prices

CAGR 2008-2022

Conventional production is down by 8% while VSS production is up by 24%

VSS production in LHDCs is up by 19%

COFFEE PRODUCTION IN LHDCs

12% of total coffee produced

8-9% of VSS compliant coffee produced based on 2016 data

Of the top coffee-growing countries, Brazil, Vietnam, Indonesia, Ethiopia and Colombia offer good prospects for increased sustainable coffee production, considering their total coffee output and existing presence of VSSs. Notably, only one of those five top coffee-growing countries, specifically Ethiopia, is an LHDC: the overall contribution of LHDCs to global coffee production is still relatively small compared to the largest coffee producers. In terms of the opportunities for expanding VSS-compliant coffee production in LHDCs and the potential for maximizing sustainable development outcomes, the countries that show the most potential for growth in light of their share of total coffee production, the presence of VSSs and their HDI value are Ethiopia and Uganda, followed by Côte d'Ivoire, Madagascar and Papua New Guinea, according to our analysis based on 2019 figures.⁹ Positive development

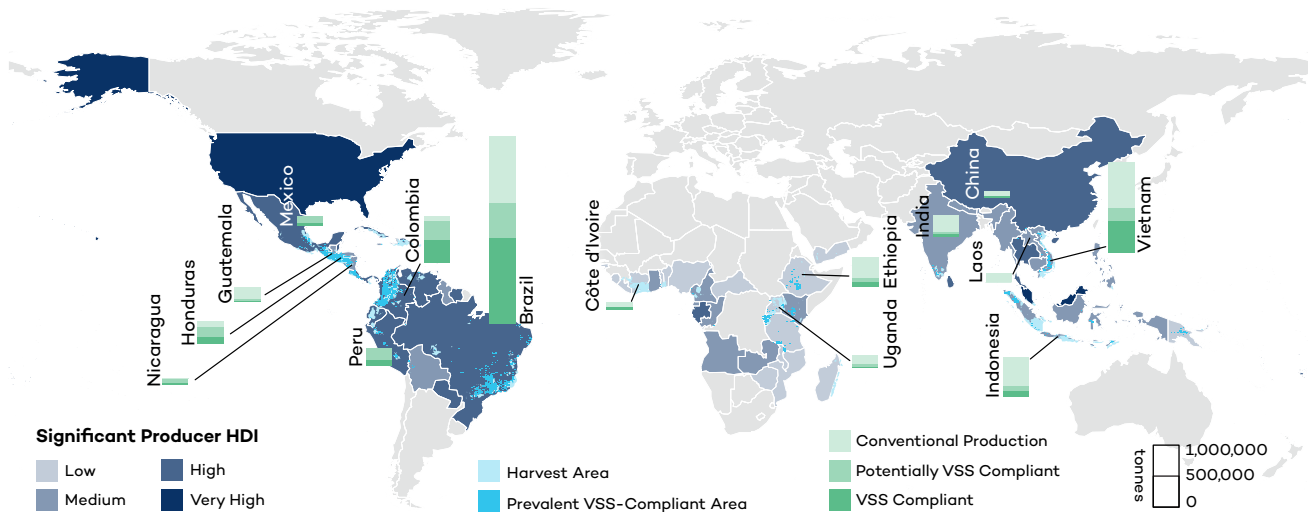
The Sustainable Commodities Marketplace Series provides a market performance overview and outlook for key agricultural commodities that comply with voluntary sustainability standards (VSSs), focusing on global sustainable consumption and production. Each year, the series focuses on a different overarching theme, with individual reports for that year devoted to providing a market update for a chosen commodity. These reports are designed to be accessible and relevant for a range of audiences, including supply chain decision makers, procurement officers, policy-makers and producers. The series builds on *The State of Sustainable Markets: 2018: Statistics and Emerging Trends*, a joint publication from IISD, the International Trade Center (ITC), and the Research Institute of Organic Agriculture (FiBL), which examines over a dozen sustainability standards for various different commodities.

This *Global Market Report* analyzes recent trends in coffee production, consumption, trade flows and other relevant areas. The report also emphasizes the potential for expanding VSS-compliant production in Low Human Development Countries (LHDC), given factors such as share of global coffee production, VSS presence and Human Development Index (HDI) value. It uses 2019 data across all three factors, given that this is the latest year with data available for VSS-compliant coffee. By comparing the growth rates and patterns of standard-compliant versus conventional consumption and production of coffee, this report provides insights on how sustainable and conventional markets are performing at a global level, and highlights which countries have the potential to produce more VSS-compliant coffee.

The State of Sustainability Initiatives (SSI) is an international transparency and capacity-building project that aims to improve strategic planning and sustainable development outcomes related to VSSs. It does so by providing in-depth, credible and needs-based information on VSS characteristics, market performance and potential contributions to addressing development challenges.

Coffee-Growing Regions of the World

Distribution of coffee production in the top fifteen producing countries in 2022



Sources: see endnotes 9, 25, 26

Download high resolution version of map at bit.ly/ssi-coffee

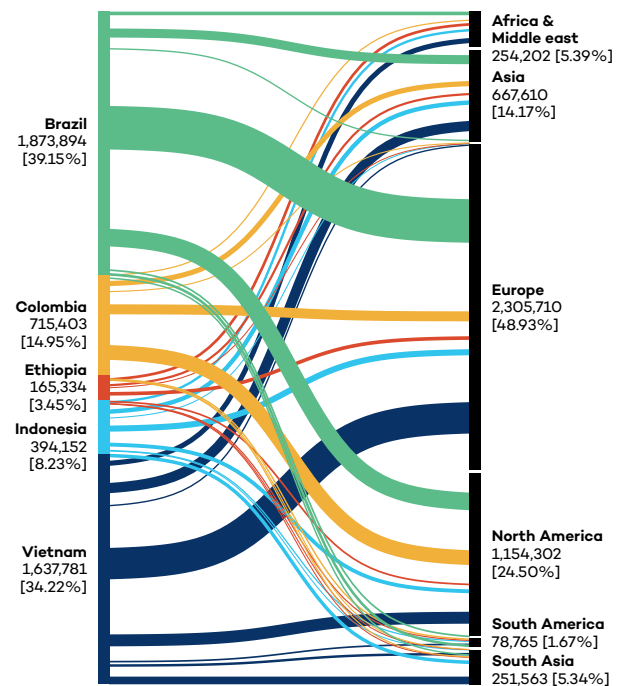
outcomes through the expansion of VSSs can also take place in the largest coffee-producing countries, such as Brazil, Vietnam and Colombia. While these are not LHDCs, their smallholder coffee farmers continue to experience poverty, and pursuing greater VSS compliance might contribute to improving their livelihoods.^{19–21}

Moving the coffee sector toward more sustainable forms of consumption and production will require additional resources and investments, given that the least demanding opportunities to do so have, for the most part, already been pursued. In addition, there is also a clear need for coordination among value chain actors, including buyers, standards bodies and roasters, to address persistent challenges in moving the coffee sector toward more sustainable production methods and consumption, including by capitalizing on the opportunities provided by VSSs. For example, these value chain actors can work together to stimulate greater demand for VSS-compliant coffee in importing and producing countries, improve farm profitability and strengthen the resilience of coffee production practices to climate change.

This coordination among value chain actors is even more important given some of the risks that the sector faces in terms of price volatility and the negative impacts of climate change, which lie largely outside their control. The emergence of several important initiatives such as the Sustainable Coffee Challenge, Sustainable Food Agriculture Environment Platform and the Global Coffee Platform, born out of the 4C standard, suggests that coffee sector stakeholders are already moving in a coordinated fashion toward a more sustainable future for coffee producers and consumers.^{22–24}

Of the leading producer countries, Brazil and Vietnam dominated coffee exports in 2016. Top importers were primarily European countries, followed by North American countries.

Figure 5. Trade flows of the largest producer countries in 2022, in metric tonnes. Coffee not roasted, not decaffeinated.



Note: These five countries represent the 68% of total coffee production in 2022. The % in brackets for each country represents the proportion of the total volume of coffee exported in 2022 by the five countries. The % in brackets for each region represents the proportion of the total volume of coffee imported in 2016 from the five countries.

Sources: see endnotes 27, 28

1. Salado, A. (2018). *Five most promising markets in coffee*. Presented at DNA Café – Seminário Internacional 2018. Retrieved from http://go.euromonitor.com/rs/805-KOK-719/imagenes/Five_Most_Promising_Markets_in_Coffee.pdf?mkt_tok=eyJpIjoiT1RrME56TTFNaUxWmpoaSIsInQiOiJQUHBMbGFmSVduSG9rSGFUcHE5d0tNSEVpRjN6TDhlnBZYkI1ejVQdUExTTVzZkR6TlwwUEc5VXRRT0ZyaGtaW5JcHkxY2lTZllzXC90VzdCMUYwT01nbDVLdWdWZHZOcm8zVnJWaFZGNXERyK83UzBcL1Q5R0JWdROcmpqQnphMSJ9
2. International Coffee Organization. (2019, March). *Coffee market report*. Retrieved from <http://www.ico.org/documents/cy2018-19/cmr-0319-e.pdf>
3. Fairtrade Foundation. (n.d.). Coffee farmers. Retrieved from <https://www.fairtrade.org.uk/Farmers-and-Workers/Coffee>
4. Panhuysen, S., & Joost, P. (2018). *Coffee Barometer 2018* (p. 36). Retrieved from <https://www.hivos.org/assets/2018/06/Coffee-Barometer-2018.pdf>
5. International Coffee Organization. (2019, April 12). *Report of the 16th meeting of the Statistics Committee held on 27 March 2019* (SC 93/19). (p. 4). Retrieved from <http://www.ico.org/documents/cy2018-19/sc-93e-report.pdf>
6. Workman D. (2019). Coffee exports by country. Retrieved from <http://www.worldstopexports.com/coffee-exports-country/>
7. Mordor Intelligence. (2018). Coffee market – Growth, trends and forecasts (2018-2023). Retrieved from <https://www.mordorintelligence.com/industry-reports/coffee-market>
8. Sänger, C. (2018, April 25). *State of the global coffee market*. Presented at the 10th Multi-Year Expert Meeting on Commodities and Development, Geneva, Switzerland. Retrieved from https://unctad.org/meetings/en/Presentation/MYEM2018_Christoph%20Saenger_25042018.pdf
9. Lernoud, J., Potts, J., Sampson, G., Schlatter, B., Huppe, G., ... Dang, D. (2018). *The state of sustainable markets 2018: Statistics and emerging trends*. Geneva, Switzerland: International Trade Centre. Retrieved from <http://www.intracen.org/uploadedFiles/intracenorg/Content/Publications/Sustainability%202018%20layout-FIN-web2.pdf>
10. Food and Agriculture Organization. (2017). Producer prices – Annual. Retrieved from <http://www.fao.org/faostat/en/#data/PP>
11. Potts, J., Lynch, M., Wilking, A., Huppe, G., Cunningham, M., & Voora, V. (2014). *State of sustainability initiatives review 2014: Standards and the green economy*. Winnipeg, Canada: International Institute for Sustainable Development, International Institute for Environment and Development.
12. Nielsen. (2018). Sustainable shoppers buy the change they wish to see in the world. The Evolution of the Sustainability Mindset. Retrieved from <https://www.nielsen.com/us/en/insights/reports/2018/the-education-of-the-sustainable-mindset.html>
13. Elliott, K.A. (2018). *What are we getting from voluntary sustainability standards for coffee?* Retrieved from <https://www.cgdev.org/sites/default/files/what-are-we-getting-voluntary-sustainability-standards-coffee.pdf>
14. Nestlé. (2017). *Nestlé in society: Creating shared value and meeting our commitments 2017*. Retrieved from https://www.nestle.com/asset-library/documents/library/documents/corporate_social_responsibility/nestle-csv-full-report-2017-en.pdf#page=56
15. Keurig Green Mountain. (2017). *Keurig Green Mountain 2017 sustainability report*. (p. 30). Retrieved from http://www.keuriggreenmountain.com/~media/Sustainability/PDF/ReportsDisclosures/KeurigSustainabilityReport_2017.ash
16. Tchibo. (2018). Sustainability. Retrieved from <https://www.tchibo-coffee.co.uk/sustainability/>
17. Starbucks. (2017). *Global social impact: 2017 performance report* (p. 24). Retrieved from https://stories.starbucks.com/wp-content/uploads/2019/01/Starbucks_Social_Impact_Report_2017.pdf
18. Smucker's. (2018). Green coffee: Responsible sourcing. Retrieved from <http://corporateresponsibility.jmsmucker.com/sourcing/coffee.php>
19. Summers, C. (2014). How Vietnam became a coffee giant. BBC News. Retrieved from <https://www.bbc.com/news/magazine-25811724>
20. Lamm, S. (2013). Poverty and the coffee industry. The Borgen Project. Retrieved from <https://borgenproject.org/poverty-coffee-industry/>
21. Degn, E. (2018). How fair trade coffee in Colombia could solve the poverty struggle. The Borgen Project. Retrieved from <https://borgenproject.org/how-fair-trade-coffee-in-colombia/>
22. Global Coffee Platform. (n.d.). Accelerate your coffee sustainability. Retrieved from <https://www.globalcoffeeplatform.org/accelerate-your-coffee-sustainability>
23. Conservation International. (n.d.). Sustainable Coffee Challenge. Retrieved from <https://www.sustaincoffee.org/about>
24. Inter-American Development Bank. (n.d.). SAFE Sustainable Agriculture Food Environment. Retrieved from <http://www.safeplatform.org/>
25. Monfreda, C., Ramankutty, N., & Foley, J. A. (2008, March). Farming the planet: 2. Geographic distribution of crop areas, yields, physiological types, and net primary production in the year 2000. *Global Biogeochemical Cycles*, 22, 1. doi: 10.1029/2007GB002947. Retrieved from <http://www.earthstat.org/harvested-area-yield-175-crops>
26. Tayleur, C., Vickery, J., Butchart, S., Corlett W. C., Buchanan, G... Ducharme, H. (2017). GIS data for: Where are commodity crops certified, and what does it mean for conservation and poverty alleviation?, Mendeley Data, v2. Retrieved from <https://data.mendeley.com/datasets/mpdf6ytswm/2>
27. Chatham House. (2017). Resource Trade. Earth. Retrieved from <https://resourcetrade.earth/>
28. Food and Agriculture Organization. (2017). Production Quantity. Retrieved from <http://www.fao.org/faostat/en/#data/QC>

External Peer Reviewer: Damon Z., Getbiopak

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