



Coffee producer country profile: Ethiopia

An overview of the economic model of Ethiopian coffee farms

REPORT

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1. Relevant context regarding economic viability

This section begins with an overview of farming in Ethiopia (1.1). In the subsequent sections 1.2 through 1.4 we detail critical aspects of the Ethiopian coffee trade that must be reviewed if one is to understand the economic functioning of the value chain.

1.1. Overview

Ethiopia is Africa's largest coffee producer and the world's fifth largest exporter of Arabica coffee. For the crop year 2023/2024, it is estimated that total production will reach 8.35 million bags, i.e., 501,000 metric tonnes. However, of this amount, a large portion will be consumed domestically. Regarding exports, Ethiopia's main trading partners for coffee in growing year 2020/2021 were, in volume terms and in decreasing order of importance: Germany (19% of volumes), Saudi Arabia (17.3%), the USA (12.5%), Belgium (9.7%), Japan (7%), South Korea (6.3%), and Sudan (3.2%).¹ The list of countries and their respective shares of value broadly resemble the data for volumes.²

Smallholders under 1 ha represent the vast majority of the production in Ethiopia, but coffee is not their only source of income. Instead, they diversify to make ends meet: selling food or cash crops, running a small shop, owning a transport business, working on a neighbouring farm, etc. According to several surveys, the coffee part of the net income of coffee-growing families “ranges from 30% (Harar) to 50% (Sidama), but most regions are near to a level of 40%.”³ Common sources of income other than coffee include grains, maize, qat, and off-farm labour,⁴ in addition to other forest/farm crops like firewood, honey, and rare spices – forest pepper and *Aframomum corrorima*, a kind of false cardamom.⁵ Yields in Ethiopia tend to be low, as are inputs. Chemical fertilizer and pesticides are very rarely used, as it is not customary and/or the price of chemical inputs is too high for Ethiopian farmers.

Except in the most remote areas, smallholders in Ethiopia typically have a range of actors to whom they can sell their cherry (red or dried) at either a kebele-level “selling centre,” or at a washing station specialized in wet processing.⁶ Higher-quality washed Arabicas are slowly gaining ground thanks to the spread of wet mills in the countryside, but progress is slow because harvesting red cherries is very labour-intensive and because in a high inflationary context, farmers prefer drying their coffee as a form of savings and insurance through the entire year. At selling centres and washing stations, a farmer will typically encounter small private traders, medium-size traders, or cooperatives to buy his

¹ USDA Foreign Agricultural Service. “Ethiopia: Coffee Annual 2022,” September 9, 2022.

² Ibid.

³ Minten et al. 2015a:9; Mitiku et al. 2017:9, cited in SudWind. “Impact of Supply Chain Relations on Farmers' Income in Ethiopia,” October 2020. The exact figure is 37.7% in the article Minten et al., “Coffee Value Chains on the Move: Evidence in Ethiopia,” August 2017. Calculated from figures in Table 3.1, page 6. The Ethiopia Strategy Support Program (ESSP) study, a benchmark study conducted in February 2014 that has inspired numerous academic papers, likewise estimates that on average 40% of the income of farmers comes from coffee production. Global Coffee Platform. “African Coffee Sector: Addressing National Investment Agendas on a Continental Scale. Ethiopia Case Study,” September 2016.

⁴ Global Coffee Platform 2016, op. cit.

⁵ Enveritas. “Creating a ‘Coffee Rejuvenation Impact’ Index for Ethiopia,” 31 August 2019.

⁶ A *kebele* is the smallest administrative unit in Ethiopia.

or her coffee. However, farms above 2 hectares can sell their coffee directly to exporters, and so can cooperatives and traders, provided they have a licence to do so.

As of 2018, only 10% of Ethiopian farmers were said to be members of cooperatives (GCP cited in SüdWind).⁷ More recent information suggests that between 10% and 20% of farmers might be members of cooperatives.⁸ Cooperatives are organized into Unions, the largest of which were established in the late 1990s/early 2000s and have upwards of 50,000 members.⁹ The level of membership in cooperatives varies greatly from region to region.¹⁰ It should be emphasized that farmers are free to sell to traders outside the cooperatives and cooperative unions, and they may sell the majority of their crop to other traders who work for private companies¹¹ – by one estimate, around 10% to 30% of coffee production is marketed by cooperatives.¹²

1.2. Farmgate price situation

Ethiopia consumes around half the coffee it produces on the domestic market – usually lower-quality coffee, as high-quality coffee is expected to be sold on the international market. The government forbids the sale of any export-grade coffee on the local market, even when the local market offers a better price.¹³ There is nonetheless a domestic market for high-quality coffee which may be illegally supplied with high grade coffee when prices are higher than those fetched by exports.¹⁴

Regarding exports, most published estimates of the farmgate capture of the FOB coffee price by Ethiopian farmers are relatively low – between 50% and 60%.¹⁵ This is because of factors such as poor transport infrastructure, low levels of organization at cooperatives and the fact that farmers in Ethiopia outsource post-harvest processing to actors down the chain.

⁷ SüdWind. “Impact of Supply Chain Relations on Farmers’ Income in Ethiopia,” October 2020, p. 23.

⁸ BASIC Interview with Ethiopia coffee sector expert, 16 November 2023; according to other interviewees, there are currently 6 cooperative unions, around 580 cooperatives, and about 550,000 members (BASIC Interview with Ethiopia coffee sector expert, 6 September 2023). This would mean that approximately 1 in 10 of Ethiopia’s coffee smallholders are members of a cooperative.

⁹ Examples cited were the Oromia Coffee Farmers Cooperative Union, est. 1999 with 75,000 members as of 2010 (their website claims to currently represent 557,000 households: <http://tinyurl.com/22n5uxlv>); the Sidama Coffee Farmers Cooperative Union, est. 2001 with over 80,000 farmers (<https://sidamacoffee.com/>); Yirgacheffe Coffee Farmer’s Cooperative Union, est. 2022 with 46,000 farmers (<https://yirgacheffeunion.com/>); Kafa Forest Coffee Farmers Cooperative Union, est. 2004 with nearly 10,000 farmers (cf. FairTrade Africa. “Kafa Forest Coffee Farmers’ Cooperative Union,” June 2022. <https://fairtradeafrica.net/wp-content/uploads/2022/06/Kafa-Forest-Digital.pdf>.) BASIC bibliographical research and Interview with Ethiopia coffee sector expert, 16 November 2023.

¹⁰ According to one estimate, around 60 to 80% of farmers are members of cooperatives in Sidama and Guji, while in Wolaita the figure is closer to 5%. This also reflects the history of the cooperatives: while in Sidama and Guji they were formed by farmers to secure a better market for their coffee, in Wolaita province the cooperative union was government-established. Inter Aide. “Report on the Visit in Sidama – Oromia,” April 2021.

¹¹ BASIC Interview with Ethiopia coffee sector expert, 15 February 2024.

¹² SüdWind. “Impact of Supply Chain Relations on Farmers’ Income in Ethiopia,” October 2020, p. 23. One source told the author that “it is estimated that 8% of the coffee produced in Ethiopia goes through cooperatives and unions.”

¹³ USDA (FAS) 2023, op. cit.

¹⁴ BASIC Interview with Ethiopia coffee sector expert, 20 April 2023 and SüdWind. “Impact of Supply Chain Relations on Farmers’ Income in Ethiopia,” October 2020.

¹⁵ In 2016, for example, the Global Coffee Platform estimated that Ethiopian farmers captured only 61% of export value, with the remainder accruing to the downstream supply chain. Global Coffee Platform. “African Coffee Sector: Addressing National Investment Agendas on a Continental Scale. Ethiopia Case Study,” September 2016. Beyene et al. (2021) found that producers captured 60% of the wholesale (ECX) price on average from 2008 to 2017. Beyene et al., “Trade, Value Chains, and Rent Distribution with Foreign Exchange Controls: Coffee Exports in Ethiopia.” 2021. One interviewee placed farmgate capture at around 50% to 60% green bean equivalent (BASIC Interview with Ethiopia coffee sector expert, 13 September 2023.), while one report of a field visit to Ethiopia estimated FOB capture at around 50%. BIGG. “Our Ethiopian Experience Part Two: The Coffee.” One BIGG Island in Space (blog), 5 February 2023.

However, since 2017¹⁶, Ethiopian coffee farmers are reported to have received a (much) higher share of the FOB price. This is related to the business and banking environment in Ethiopia. Specifically, according to banking regulations, exporters must surrender a portion of the foreign exchange that they receive for their coffee to the National Bank of Ethiopia (NBE), where it is converted into birr at the official exchange rate and stored in a birr-denominated account. Meanwhile, exporters are also granted a USD-denominated account within which they store the remainder of the foreign exchange (forex) that they receive for coffee. The amount that exporters can keep in their forex accounts with the NBE has ranged from 70% before September 2021 to 40% in September 2021, and from January 2022, the rate became 20% (it is now back to 40% since August 2023).¹⁷ Exporters' forex accounts can only be used to finance imports. Furthermore, the money converted to birr on the NBE birr account is converted to the official exchange rate, which is currently around 57 birr to the dollar,¹⁸ whereas on the black market the currency is nearly double this figure (100 to 120, as of September 2023).¹⁹ According to multiple sources, this situation has led some coffee exporters to sell coffee at a loss on the international market while recouping their losses by engaging in more profitable import business activity using their forex account. Although its scale cannot be ascertained, this phenomenon is well documented (8 interviews and 4 bibliographical sources).²⁰

We hypothesize that one of the reasons that we found a relatively high level of FOB capture (approximately 94% FOB capture in our model, whereas the literature puts FOB capture at around 60%²¹) can be explained in large part by this phenomenon, in line with the study conducted by Beyene et al. in 2021.²² Our farmgate capture is calculated as the ratio of green-bean equivalent farmgate on

¹⁶ Beyene et al., "Trade, Value Chains, and Rent Distribution with Foreign Exchange Controls: Coffee Exports in Ethiopia." 2021; also confirmed by BASIC Interview with Ethiopia coffee sector expert, 24 July 2023.

¹⁷ In other words, "As per the existing [January 2022] regulation, exporters were required to surrender 70 percent of their foreign currency earnings to the central bank at the prevailing exchange rate. They were only allowed to retain 20 percent of the earnings. The remaining 10 percent had to be surrendered to commercial banks." In August 2023, "the National Bank of Ethiopia doubled the retention limit for exporters to 40 percent of their foreign exchange proceeds. Since then, exporters will have to surrender only 50 percent of the forex earnings to the central bank. The 10 percent share for commercial banks remains unchanged." Frontier Africa Reports. "Ethiopia Doubles Foreign Currency Retention Limit for Exporters", 28 September 2023. <https://www.frontierafricareports.com/article/ethiopia-doubles-foreign-currency-retention-limit-for-exporters>. See also Mehrteab Leul & Getu Associates. "The National Bank of Ethiopia's New Directive on Retention and Utilization of Foreign Currency Earnings from Export and Inward Remittance (06 January 2022)", 27 January 2022. <https://mehrteableul.com/index.php/insights/news-and-updates/item/42-the-national-bank-of-ethiopia-s-new-directive-on-retention-and-utilization-of-foreign-currency-earnings-from-export-and-inward-remittance-06-january-2022>.

¹⁸ It was around 32 birr to the dollar in January 2021, and 46 birr to the dollar in January 2021.

¹⁹ BASIC Interview with Ethiopia coffee sector expert, 13 September 2023.

²⁰ BASIC Interview with Ethiopia coffee sector experts, 13 September 2023, 6 September 2023, 16 November 2023, 28 July 2023, 24 March 2023, 9 February 2024, 12 February 2024, and 7 March 2024. As for the literature/bibliography, in the words of four different sources: "coffee exporters are willing to incur losses during exporting by offering high prices for coffee locally in order to access scarce foreign exchange. [...] the consequent high wholesale prices for coffee are transmitted to producers, so that coffee farmers are unintended beneficiaries of this rent." Beyene et al. 2021, op. cit. Also, "It is to be noted that Ethiopian coffee has been selling far above the international coffee market prices. Although partly due to high domestic consumption and high production costs, prices are mainly driven up by the country's restricted foreign currency policy. This has attracted opportunistic players from other sectors like vehicles and construction to the coffee business as a means to gain foreign currency. They buy coffee at a high price and export at a loss, while making huge profits from their imported goods/equipment." Fairtrade International. "Fairtrade Living Income Reference Price for Coffee from Ethiopia: Explanatory Note," July 2023. Third, "some traders buy coffee via the ECX at a price that cannot be obtained by exporting the coffee. In other words, they know that they buy at a price which is higher than the world market is prepared to pay for Ethiopian coffee. They are prepared to do this, because they need the foreign currency for other businesses with high margins. This assessment was shared with very similar words by many interviewees." SudWind. "Impact of Supply Chain Relations on Farmers' Income in Ethiopia," October 2020. Finally, this phenomenon is also mentioned in the Ithaka Coffee blog on 25 May 2020, 30 October 2020, and 5 February 2021, to cite just a few. See <https://www.coffeeithaka.com/>.

²¹ For sources for the 60% figure, see above.

²² Beyene et al., "Trade, Value Chains, and Rent Distribution with Foreign Exchange Controls: Coffee Exports in Ethiopia." 2021

the one hand, and FOB price on the other, and for this period²³ the import/export situation drove up farmgate prices, as detailed above.²⁴ Further, our calculations do not take into account the margins made by coffee exporters off their import business. Although they sell coffee at a loss, they can make a significant margin on their imports. If these margins were to be considered and added into the model, then the farmgate capture ratio would decrease.

The foreign exchange situation also leads coffee traders and exporters to hold on to their coffee, in the hope of a further devaluation;²⁵ this practice is condemned by the local authorities, which regularly inspect warehouses and impose fines on coffee “hoarders”²⁶ and in 2022 ordered exporters to sell their coffee while they were still at risk of taking a loss.²⁷ The Government of Ethiopia has also attempted to rectify the situation by imposing, from 28 January 2020 onwards, a minimum export price for coffee that is published on a weekly basis by the Ethiopian Coffee and Tea Authority.²⁸

1.3. The Ethiopian Commodity Exchange (ECX)

Launched in 2008, the ECX is a public-private partnership that benefits from significant support from the Ethiopian State. Its aim is to organize and streamline coffee transactions on its territory to reduce the information imbalance that puts coffee producers at a disadvantage. The ECX operates a physical network of Primary Market Centres (PMCs) meant to serve as the first point of collection for much of the country’s coffee; these PMCs operate in close partnership with cooperatives, which are slowly developing in Ethiopia.²⁹ Once graded for quality at an ECX Warehouse Delivery Centre, the coffee is brought to a marketplace where, in theory, supply and demand for agricultural products meet in a way that most closely approximates pure and perfect competition rules (players' information, standardized quality, transaction anonymity, etc.). Other commodities like sesame, legumes, wheat, and maize are also traded on the exchange. The currency in use on the exchange is the Ethiopian birr. Coffee is traded as parchment coffee for washed Arabicas, and green coffee for naturals.

The ECX has three kinds of coffee contracts: export commercial, export specialty,³⁰ and local coffee. At Warehouse Delivery Centres, the ECX assigns grades based on three factors:³¹

1. Place of origin (regional profile reflecting the taste of the coffee, not always its actual region)³²
2. Washed vs. natural
3. Grade from 1 (best) to 5 (poorest).

The first of its kind on the African continent, this structure temporarily revolutionized the organization of green coffee marketing chains in Ethiopia. The main criticisms of the ECX were that it did all the grading and exporters did not have an opportunity to sample what they were buying – they could see

²³ The year used for the purpose of this study is October 2020 to September 2021, so as to accommodate the different calendars at which coffee is harvested in the four different countries.

²⁴ Another factor is that the number of exporters increased, creating competition in the field – see discussion below.

²⁵ USDA (FAS) 2023, op. cit. and BASIC Interview with Ethiopia coffee sector expert, 28 July 2023.

²⁶ USDA FAS (Foreign Agricultural Service), “Ethiopia: Coffee Annual,” 19 May 2023

²⁷ BASIC interview with Ethiopia coffee sector expert, 13 February 2024.

²⁸ USDA Foreign Agricultural Service. “Ethiopia: Coffee Annual 2021,” 14 May 2021 and “Ethiopia: Coffee Annual 2022,” 9 September 2022

²⁹ BASIC Interview with Ethiopia coffee sector experts, 20 April 2023 and 16 November 2023. Ethiopia has several large cooperatives and cooperative unions, and membership has increased in recent years to reach between 10% and 20% of Ethiopian coffee farmers.

³⁰ It is under pressure from international buyers that the ECX modified its grading system to accommodate specialty coffee. BASIC Interview with Ethiopian coffee sector expert, 24 March 2023.

³¹ BASIC Interview with Ethiopia coffee sector expert, 24 March 2023.

³² Nordic Approach. “Transparency in Ethiopia,” 2020.

the coffee but not cup it; and that specialty and semi-washed coffees were not sufficiently valued.

Nearly all exports of Ethiopian green coffee were under ECX's control, except for 'speciality' labelled coffees marketed by cooperatives and, more recently, large plantations, traders, and also farms above 2 hectares. These recent reforms (2017 onwards) lessened the role of the ECX in the coffee trade, to the point that its activities today are limited, although exactly how much so is subject to debate.³³ There was notably a significant decline in recourse to the ECX in 2020 as opposed to 2019 (86% less washed coffee and 69% less naturals),³⁴ reflecting “the increasing proportion of specialty coffee that is now exported through direct channels under the more flexible direct-trade policy framework to encourage fully traceable, premium-value exports.”³⁵ As of production year 2021/22, the direct-trade scheme accounted for the majority of coffee exports, handling 240,000 metric tons out of 300,000 metric tons shipped (80%).³⁶ However, grading of coffee destined for export is still a function reserved to the ECX.³⁷

The number of exporters has increased in recent years.³⁸ There are two main reasons for this: first, the race for foreign currency described above in the last ten to fifteen years has caused numerous new actors to enter the coffee business. These stakeholders are less focused on selecting quality coffee and more interested in exporting as much commercial coffee as possible to access scarce foreign exchange to finance imports.³⁹ The second reason is the direct-trade authorization of 2020/2021, which enabled so-called “vertical integration” between exporters and traders, cooperatives, and even farmers above 2 hectares. The increase in the number of exporters is said to have created upwards pressure on farmgate prices due to competition at the trader level.⁴⁰

1.4. Other background information on Ethiopian coffee

The coffee industry is vital to Ethiopia's economy and foreign exchange balance. There are an estimated 4.5 million smallholder coffee farmers in Ethiopia, and an additional 15 to 30 million people (i.e., up to 25% of the country's population) directly or indirectly dependent on this industry.⁴¹ Coffee is also vital to the state, generating at least 24%⁴² of the country's total export earnings – 30%

³³ Nordic Approach 2020, op. cit. One interviewee said only about 10% of Ethiopia's crop still transits through the ECX, and it is all low quality (23 June 2023); another said the ECX is virtually defunct with all transactions taking place through direct trade (24 July 2023). Note that the USDA 2022 “Coffee Annual” for Ethiopia continued to state that in crop year 2021/2022, “80–85% [of Ethiopian coffee for export] goes through the ECX.” This appears to be a reference to the ECX's role grading coffee, rather than its role as a trading platform.

³⁴ Ithaka Coffee. This Week in Ethiopia: ECX Sale Volumes Drop Like a Stone!, 21 July 2020 <https://www.coffeeithaka.com/2020/07/31/>.

³⁵ USAID. “Feed the Future Ethiopia Value Chain Activity,” 2021. Charles Seara Cardoso of the Ithaka Coffee blog seconds this analysis, writing in November 2020 that “Since Y-O-Y ECX sales (to November) are down by 30% we believe that a higher proportion of coffee is by-passing ECX, with most of this growth coming from *Vertical Integration deals* [emphasis added] rather than increased production on large farms or increased exports by Cooperatives.”

³⁶ *Capital* magazine, “Government condemns coffee traders for defaulting on vertical trading platform,” 10 March 2024.

³⁷ BASIC Interview with Ethiopia coffee sector expert, 16 November 2023.

³⁸ There are reportedly over 1,500 exporters of coffee today whereas there were only 50 or so twenty years ago. BASIC Interview with Ethiopia coffee sector expert, 7 March 2024.

³⁹ BASIC Interviews with Ethiopia coffee sector experts, March 2024.

⁴⁰ Algrano. “New Ethiopian Coffee Harvest: Price, Quality & What to Expect in 2024,” 6 December 2023 and CUPRIMA. “Ethiopia: What to Expect from Crop Year 2022/2023,” 27 April 2023.

⁴¹ USAID. “Feed the Future Ethiopia Value Chain Activity,” 2021, citing USDA; Gurmessa et al., “Sustainability and Gender Dynamics of Coffee Value-Chain Development Intervention: Lessons from Ethiopia.” 2022. Also USDA FAS (Foreign Agricultural Service), “Ethiopia: Coffee Annual,” 19 May 2023

⁴² ICO. “The Value of Coffee. Sustainability, Inclusiveness, and Resilience of the Coffee Global Value Chain,” 2020.

to 35% by other estimates.⁴³ The area harvested has also increased substantially since the 1990s, partly as a result of deforestation due to the expansion of coffee cultivation.⁴⁴

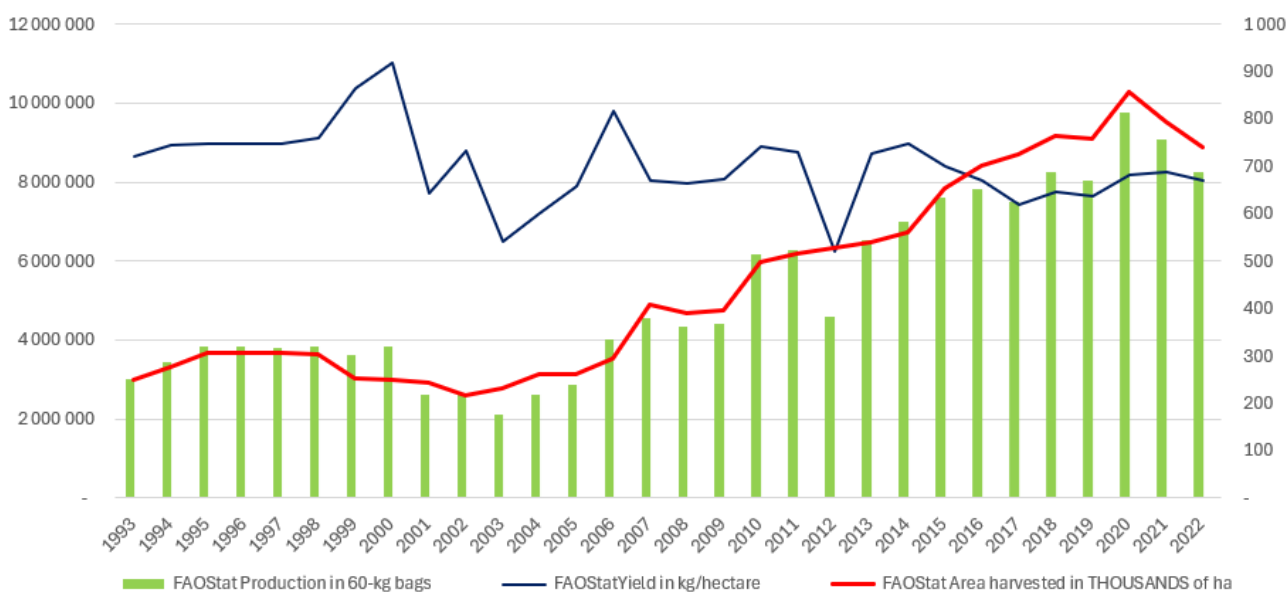


Figure 1. Ethiopia coffee production (left axis), area harvested (right axis), and yield (right axis), 1993-2022

Source: BASIC, based on FAOStat (production, area harvested, yield).⁴⁵

Remark: the decision to represent area harvested in thousands of hectares was so as to make it clear on the chart the relative contribution of both yields and surface area to growth in production over timer. The rise in production in response to the expansion of surface area is also significant and easily seen.

2. Producers’ archetypes

⁴³ USDA (FAS) 2023, op. cit.

⁴⁴ The main drivers are “A rapid increase in population, government policies promoting intensive coffee production, farming practices by individuals who did not participate in the [Rainforest Alliance] certification program, a lack of incentive to conserve the forest, and loopholes in the auditing process.” Arai et al. “Challenges in Conserving Forest Ecosystems through Coffee Certification: A Case Study from Southwestern Ethiopia.” *Frontiers in Environmental Science* 11 (24 July 2023). <https://doi.org/10.3389/fenvs.2023.1193242>, citing numerous articles from the early 2000s onwards covering different areas of the country. In January 2024, the Ethiopian government in partnership with the United Nations Development Programme (UNDP) and with the support of the Global Environment Facility (GEF), launched a major project to tackle deforestation, promote forest restoration, and integrate sustainability into the country's coffee value chains and food systems. UNDP. “Ethiopia Launched a Significant Project to Combat Deforestation and Boost Coffee Production in Ethiopia,” 2 January 2024.

⁴⁵ FAOStat link: <https://www.fao.org/faostat/en/#data/OCL>.

Methodological remarks

In sections 2 and 3 we examine production costs and income dynamics for different archetypes of farms in Ethiopia. It should be underlined that Ethiopia, like other countries, has an extraordinary diversity of farm profiles and that modelled figures are just that – our best model to translate a complex reality. Second, when discussing labour, we clearly distinguish between different types of labour: in Ethiopia, farms use a mix of family, collective, and hired labour. The type of labour that is referred to is clearly indicated whenever labour is discussed. Third, we make a distinction between total farm coffee income and net farm coffee income. Total farm coffee income per kilogram is based on the farmgate price obtained from multiple interviews and in bibliographical research. Net farm coffee income is calculated as total coffee income minus costs of coffee production.

Coffee is traditionally produced in the highlands in the south and southwest of the country. Coffee from southern regions (Sidamo, Guji, Yirgacheffe) and from the high-altitude parts of the Limu region is considered to be of higher quality.⁴⁶

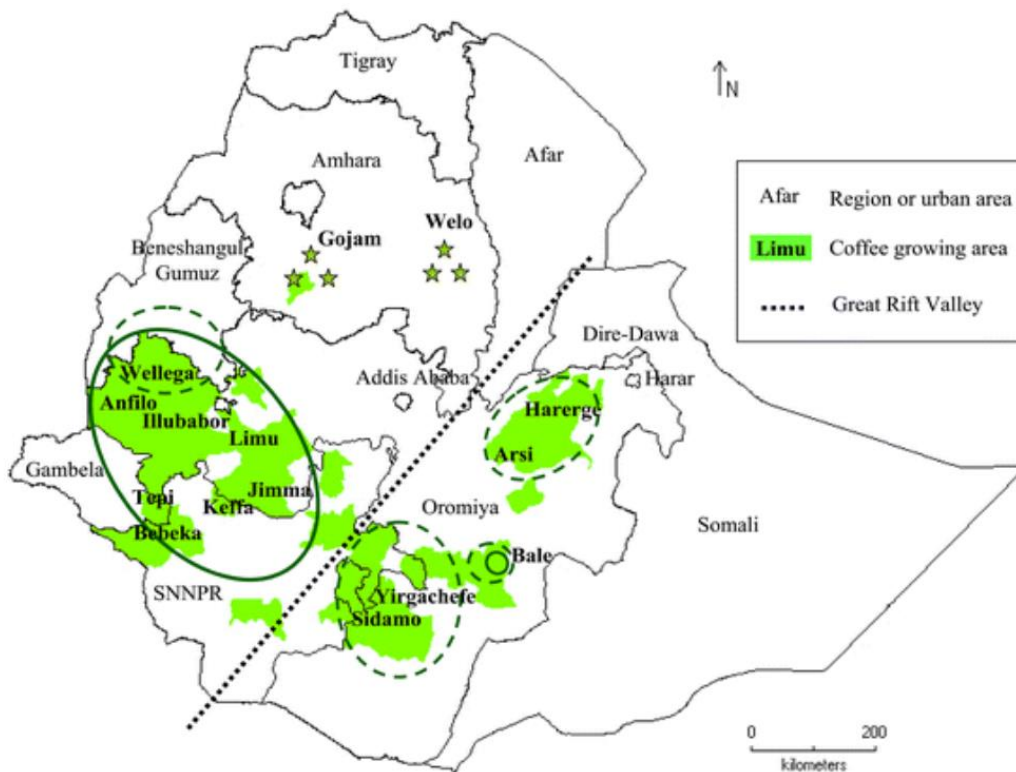


Figure 2. Key coffee growing areas in Ethiopia. Source: USDA, 2023⁴⁷

We have been able to identify several archetypes of coffee production.⁴⁸ It should be noted that the garden, semi-forest and forest coffee systems are forms of coffee farming, not archetypes of

⁴⁶ BASIC Interview with Ethiopian coffee sector expert, 6 September 2023. Also blog posts by Ithaka Coffee, growing seasons 2020/21 through 2023/24, and Nordic Approach. “Transparency in Ethiopia,” 2022.

⁴⁷ USDA (FAS) 2023, op. cit.

⁴⁸ In addition to the sources mentioned individually in each paragraph, this section is based on all BASIC interviews with Ethiopia coffee sector experts, as well as articles by Minten and by Beyene, such as: Tamru, Seneshaw, and Bart Minten. “Investing in Wet Mills and

individual farms. Together, these 3 forms of farming have been combined as a first farm archetype representative of smallholders' coffee farming. Large plantations constitute a very distinct form of coffee farming which has been considered as the second archetype for our study.

Coffee production profile	Economic model	Economic performance
Garden coffee ≈50% of total coffee production	<ul style="list-style-type: none"> - Coffee grown alongside food and non-food crops, close to the home - Planting density 1,800 to 2,500 trees/ha - Organic fertilization - Family labour supplemented with hired labour or collective local labour (if above 1 to 2 hectares) 	<ul style="list-style-type: none"> - Yield: up to 550 kg/ha green bean equivalent - Farmgate 2020/21: 22.5 birr/kg - Coffee is not usually the main source of income in Wolaita for example
Semi-forest coffee ≈35% of total coffee production	<ul style="list-style-type: none"> - Coffee harvested from wild coffee trees and/or coffee trees planted in semi-cleared forests, that are tended to - Planting density 1,200 to 2,000 trees/ha - Organic fertilization - Higher costs than garden coffee per kg - Family labour supplemented with hired labour or collective local labour (if above 1 to 2 hectares) 	<ul style="list-style-type: none"> - Yield: up to 800 kg/ha green bean equivalent - Farmgate 2020/21: 22.5 birr/kg - Coffee is more likely to be the main source of income in for example Sidama, Guji, Gedeo (incl. Yirgacheffe), Oromia
Forest coffee ≈5% of total coffee production	<ul style="list-style-type: none"> - Coffee harvested from wild trees not tended to - Family labour - Sole cost is harvest and tending to cherries as they dry 	<ul style="list-style-type: none"> - Yield: unknown - Farmgate 2020/21: 22.5 birr/kg
Plantation coffee ≈10% of total coffee production Mostly above 10 hectares	<ul style="list-style-type: none"> - Intensive agroforestry system installed on degraded secondary forest lands and woodland habitats - While some are family farms that have expanded over time, most are government-granted concessions to private companies with hired workers - The largest plantations are equipped with post-harvest processing equipment 	<ul style="list-style-type: none"> - Exact yield unknown⁴⁹ - Farmgate 2020/21: unknown, but note that some plantations are vertically integrated with an exporter. Nonetheless, in the absence of better data, we maintain the same price; 22.5 birr/kg

The forms of farming for smallholders are the following:

Washed Coffee in Ethiopia: Benefits and Constraints.” Ethiopian Development Research Institute (EDRI), August 2018. Minten, Bart, Mekdim Dereje, Ermias Legesse, and Seneshaw Beyene. “Tracking the Quality Premium of Certified Coffee: Evidence from Ethiopia.” *World Development* 101 (January 1, 2018): 119–32. <https://doi.org/10.1016/j.worlddev.2017.08.010>. Beyene et al., “Trade, Value Chains, and Rent Distribution with Foreign Exchange Controls: Coffee Exports in Ethiopia.” *Agricultural Economics* 52 (January 10, 2021). <https://doi.org/10.1111/agec.12608>. Beyene et al., “Value Addition and Farmers: Evidence from Coffee in Ethiopia.” *PloS One* 18 (January 30, 2023): e0273121. <https://doi.org/10.1371/journal.pone.0273121>. Minten et al., “Coffee Value Chains on the Move: Evidence in Ethiopia.” *Food Policy* 83 (August 1, 2017). <https://doi.org/10.1016/j.foodpol.2017.07.012>. Minten, Bart et al., “Structure and Performance of Ethiopia’s Coffee Export Sector.” ESSP Working Papers, ESSP working papers, 2014. <https://ideas.repec.org/p/fpr/esswp/66.html>.

⁴⁹ According to one interviewee (16 November 2023), plantations are high-productivity, high-yield farms. However, it was also said that family coffee farmers – especially those who have received training and high-quality seedlings – can obtain a high yield per tree, or even per hectare (interview, 6 September 2023). Conversely, those who decide to expand their family farm into a larger enterprise sometimes find themselves in financial trouble due to the cost of labour for weeding and harvesting. (Ibid.)

- **Garden system.** This mode of growing consists of transplanting or planting coffee bushes to the immediate vicinity of the farmer's home, where they grow in a "garden system" alongside other food and non-food crops with organic fertilization.⁵⁰ Garden coffee surface areas can be as little as 0.1 to 0.5 hectares, and the number of trees per family can be as low as 30.⁵¹ Some smallholders may also grow coffee more intensively, with or without shading crops.⁵² Planting density varies greatly from farm to farm and from region to region, which means that yields per hectare differ too. Garden coffee is planted at a density of 1,800 to 2,500 plants per hectare, and in green bean equivalent, garden coffee production can reach approximately 550 kg/hectare.⁵³ Approximately 50% of Ethiopian coffee is produced in such garden conditions.⁵⁴
- **Semi-forest system.**⁵⁵ This mode of production consists either of picking coffee from wild coffee trees that the farmer tends to periodically, or growing coffee after selectively cutting down trees to retain those most suitable to provide shade.⁵⁶ Semi-forest coffee is planted at around 1,200 to 2,000 plants/hectare, and in an optimal situation, semi-forest coffee can reach 800 kg/hectare green bean equivalent.⁵⁷ Approximately 35% of Ethiopian coffee is produced in semi-forest conditions.⁵⁸
- **Forest system.** Some farmers engage in "forest" picking, picking coffee from forest trees that they do not tend to at all. The only costs are hired labour for the harvest (if any) and tending to cherries while they dry. Coffee produced under this system represents approximately 5% of production.⁵⁹

Together, these modes of production are practised on around 95% of the coffee farms in Ethiopia, representing 4 million to 4.7 million farmers,⁶⁰ and at least 90% of output in volume terms. The vast majority of the related coffee surface areas are under 1 hectare. Again, these are archetypes of coffee production, not individual farms: within individual farms, growers may engage in any of the three practices in combination. Moreover, some regions are better known for one type of agriculture than another: for instance, farmers in the Wolaita region practise mainly garden and monocrop coffee (densely populated areas, few forests, see photographs below), while the Sidama and Oromia regions are known for their semi-forest coffee (see photographs below). Further, these archetypes are blurred in reality, as the profile of the land and the plants grown on it can change over time, generally in the direction of greater intensification (forest → semi-forest → garden).⁶¹

⁵⁰ According to one interviewee, it is now increasingly common for farmers to use seedlings from nurseries instead of uprooting and replanting "wildlings." BASIC Interview with Ethiopia coffee sector expert, 23 June 2023.

⁵¹ BASIC Interview with Ethiopia coffee sector expert, 15 February 2024.

⁵² See Figure 3 for an archetypal Wolaita farm of this kind. Also BASIC Interview with Ethiopia coffee sector expert, 20 April 2023.

⁵³ Fairtrade International. "Fairtrade Living Income Reference Price for Coffee from Ethiopia: Explanatory Note," July 2023

⁵⁴ SudWind. "Impact of Supply Chain Relations on Farmers' Income in Ethiopia," October 2020. These are the conditions that one finds in particular in the Wolaita region of Ethiopia, which is densely populated and where farmers have an average of maximum 100 to 150 coffee trees. BASIC Interview with Ethiopia coffee sector experts, 9, 12 and 15 February 2024.

⁵⁵ Note: what we call the "semi-forest" archetype corresponds to what Fairtrade International 2023, op. cit., calls "forest coffee" – this is evidenced by the fact that Fairtrade "forest coffee" is related to substantial investment of costs in tending to the trees, which is not the case in a "forest" system in our sense of the word.

⁵⁶ BASIC Interview with Ethiopia coffee sector expert, 20 April 2023

⁵⁷ Fairtrade International 2023, op. cit.

⁵⁸ SudWind 2020, op. cit.

⁵⁹ Fairtrade International 2023, op. cit.

⁶⁰ For the figures 4 to 4.7 million, FAO 2014 ("Analysis of price incentives for coffee in Ethiopia"); Ethiopian Central Statistics Agency (CSA) 2013, cited in Minten et al., "Structure and Performance of Ethiopia's Coffee Export Sector," 2014; and Teferi, "Coffee Weed Management Review in South West Ethiopia," 2018, citing the CSA but in 2015.

⁶¹ SudWind 2020, op. cit.

As for larger farms, there are very few above 3 hectares of coffee (the richest farmers may farm more than 5 hectares).⁶² In this ideal type, the farm is structured in more or less concentric circles or interlocked rectangles around the house, beginning with a plot of enset (a kind of false banana that is a staple crop in Ethiopia and whose leaves can serve as fodder for animals), followed by garden coffee with or without shading, followed by large fields for annual crops. The annual crops, which receive chemical fertilizer and are ploughed by oxen, provide food for humans and animals (which in turn provide manure for compost; milk; and/or ploughing power).⁶³ In-kind exchanges between local producers are a pillar of the economy in some areas (such as Wolaita, but potentially others): for instance, poor farmers farm the land of richer farmers in exchange for a share of the crop, or they may tend to the animals of richer farmers, using the manure to make compost, and sharing (if it is a cow) the butter and milk of the cow with the richer owner.

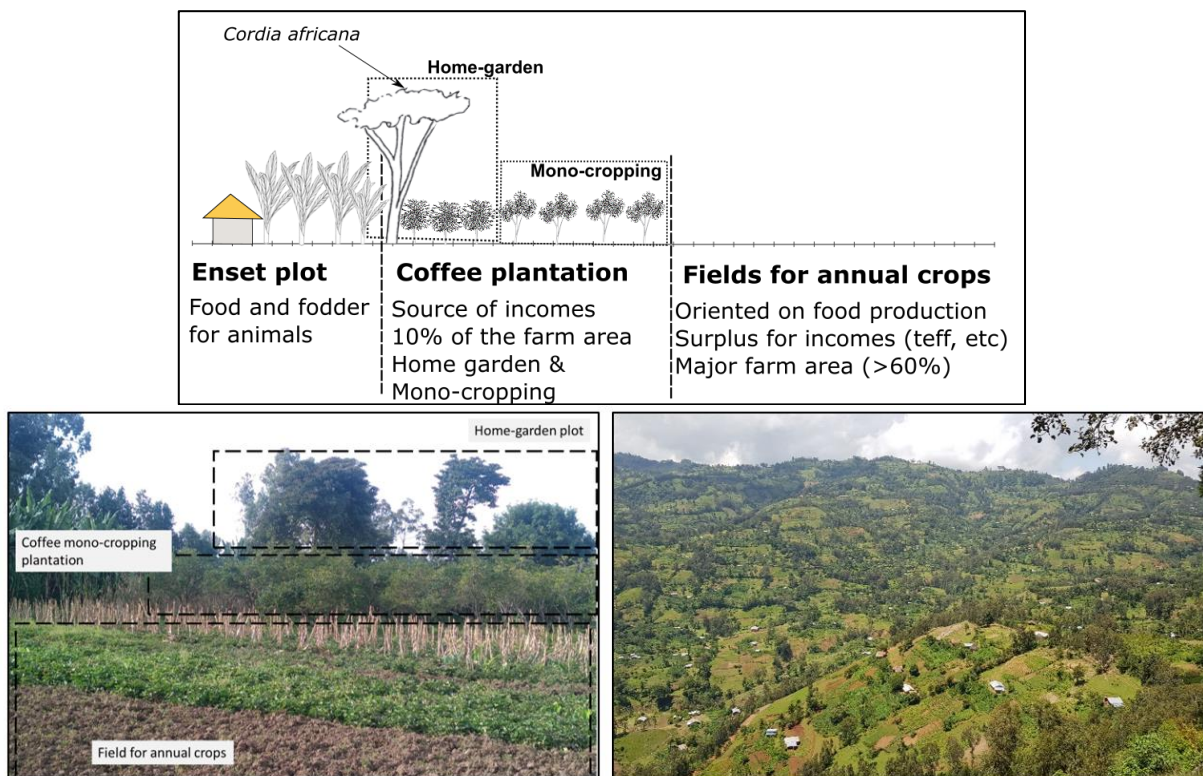


Figure 3. Archetypal family farm structure in Wolaita province, Ethiopia. Source: Inter Aide⁶⁴

⁶² This is clearly visible in the figure on page 15 of Global Coffee Platform. “African Coffee Sector: Addressing National Investment Agendas on a Continental Scale. Ethiopia Case Study,” September 2016, where one sees that the number of farmers above 3 hectares or above 10 hectares are completely absent from the graph, whereas plantations make up a few percentage points of the number of farmers. Also BASIC Interview with Ethiopia coffee sector expert, 20 April 2023.

⁶³ Inter Aide. “Report on the Visit in Sidama – Oromia,” April 2021.

⁶⁴ Inter Aide, “Agrarian Diagnosis in Ofa Woreda,” 15 September 2020.

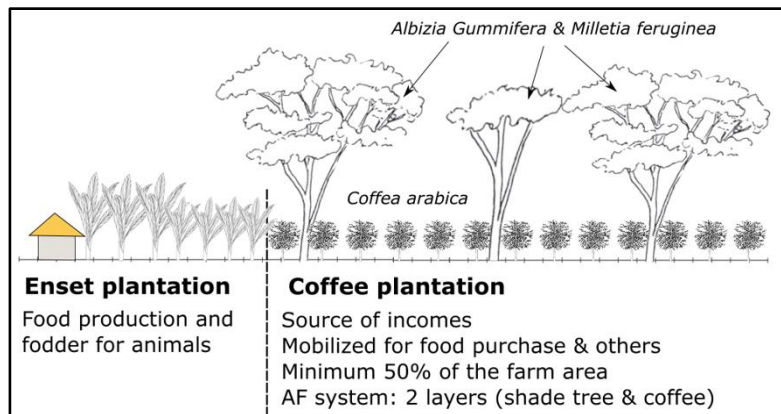


Figure 4. Archetypal family farm structure in Sidamo and Guji, Ethiopia. Source: Inter Aide⁶⁵

- **Plantation coffee (mainly above 10 ha).** Coffee can also be grown in a plantation style, meaning an intensive agroforestry system that functions as a corporation employing workers, as opposed to a farm where the owner farms the land directly and is self-employed.⁶⁶ Some plantations are the natural result of expansion of family farms over more and more land,⁶⁷ but in the last two decades the state has also granted large concessions of land (beginning around 10 ha but going up to 1,000 ha)⁶⁸ to private enterprises to grow coffee in an intensive agroforestry system.⁶⁹ Some were initially forest concessions that were partially cleared to make way for coffee, while others were fallow land or land used for other annual crops. According to one description, “commercial/large-scale producers manage coffee plantations mainly in degraded secondary forest lands and woodland habitats, and to a lesser extent semi-forest coffee production.”⁷⁰

Some of these plantations are vertically integrated up to the export stage. Many hire farm workers. Neighbouring farmers may sometimes work for the plantation, and they are usually invited to sell their ripe cherries to the plantation. Beginning at around 50 to 100 hectares in size, these plantations are said to include a washing station.⁷¹ These plantations represent around 5% to

⁶⁵ Ibid.

⁶⁶ BASIC Interview with Ethiopia coffee sector expert, 20 April 2023.

⁶⁷ BIODEV 3030 et al., “Ethiopian Coffee Sector and Biodiversity: Options and Scenarios of Voluntary Commitments in Favor of Biodiversity by Key Economic Actors in Bale Eco-Region and Southwest Forests,” November 2022.

⁶⁸ One interviewee reported knowing of a plantation that was 40,000 hectares. BASIC Interview with Ethiopia coffee sector expert, 24 March 2023.

⁶⁹ BASIC Interview with Ethiopia coffee sector expert, 24 March 2023.

⁷⁰ BIODEV 3030 et al., “Ethiopian Coffee Sector and Biodiversity: Options and Scenarios of Voluntary Commitments in Favor of Biodiversity by Key Economic Actors in Bale Eco-Region and Southwest Forests,” November 2022.

⁷¹ BASIC Interview with Ethiopia coffee sector expert, 20 April 2023.

10% of national production. (The Global Coffee Platform estimated in 2016 that about 200 plantations produce ~7% of total coffee volumes in Ethiopia and in 2018 revised this estimate to 10% of total volumes.)⁷²

3. Results of the model

Ethiopian coffee accounts for 5% of coffee imports in Germany, but just 0.5% of German supermarket sales are single origin Ethiopia certified, most of them being organic coffee (75%). It is likely that most Ethiopian coffee production is incorporated in higher value products (certified coffee, coffee capsules and overall national brand products), due to the higher price and quality of Ethiopian green coffee.

3.1. Farm level

This section presents the results of our research on the Ethiopian coffee family farms that are included in the model. The first take away of our research is the low level of expenses linked to the costs of production of coffee in Ethiopia:

Cost of agricultural inputs. Unlike for the other producing countries, in Ethiopia synthetic inputs on *coffee* are virtually unheard of (they are used on some annuals). The costs linked to fertilization are manual labour costs associated with producing compost and applying it to the farmland. Farmers rely on livestock to produce manure for compost; as noted, there are modes of production whereby farmers who do not have enough capital to purchase an animal will tend to a milk cow belonging to a wealthier family and are paid for this service in-kind (part of the cow's production of milk or butter). This system enables poor farmers without livestock to obtain valuable organic fertilizer.

Cost of hired labour. Based on the information collected for this study, family labour is supplemented with hired labour or collective local labour only in cases of farms above 1 to 2 hectares (cf. section 2 above). However, according to several sources, even small farms would need to hire external labour for fertilization, weed control, rejuvenation, harvest, post-harvest processing, and replanting.⁷³ In practice, according to one interviewee, a large proportion of small farmers do not have the means to hire the labour to farm their land and are thus unable to increase their productive area; it becomes more lucrative to send one family member to the city than it is to increase farm income through expanding agricultural acreage.⁷⁴ Collective labour, rotating from farm to farm within a single village, is also a practice used to increase accessibility to hired labour at a low price.⁷⁵

⁷² Global Coffee Platform 2016, op. cit.; Global Coffee Platform. "Ethiopia: A Quick Scan on Improving the Economic Viability of Coffee Farming," August 2018.

⁷³ BASIC Interview with Ethiopia coffee sector expert, 20 April 2023 and Fairtrade 2023, op. cit.

⁷⁴ Ibid.

⁷⁵ BASIC Interview with Ethiopia coffee sector experts, 6 September 2023 and 7 March 2024.

In addition to the (very) low level of expenses linked to the costs of production of coffee, another factor which singles out Ethiopia from the other countries included in our analysis (Brazil, Colombia, Vietnam) is that we were unable to quantify these expenses because of the lack of statistics and available data (see text box below).

Methodological note: lack of data on the costs of production of Ethiopian coffee

Despite having conducted 12 interviews and reviewed dozens of articles and reports, we were not able to arrive at a satisfactory quantification of expenses linked to the costs of production of Ethiopian coffee. While one academic paper did provide production costs,⁷⁶ it was limited to a single region of Ethiopia and did not make a clear distinction of whether the costs were for garden or semi-forest coffee. Meanwhile, the Fairtrade living income study of 2023 did not calculate current production costs, but rather the costs related to “sustainable” coffee production.⁷⁷ In the absence of robust data on the current situation disaggregated by production model, we have focussed our analysis on the determinants of coffee farm income.

Based on the above-mentioned results, the total coffee income of the **Ethiopian coffee family farms** that is estimated in the model corresponds to the amount of money left for them to pay for the expenses linked to coffee production (if there are any), remunerate the work of the farmer who is self-employed and the work of his/her family members as well as invest on the farm, spend on contingencies and emergencies, etc. Beyond these costs borne by coffee farmers’ families, the information collected in this study did not allow any estimate of “net profits” at the level of Ethiopian coffee farmers, in large part because of their self-employed structure. Therefore, the available data did not make it possible to come up with any estimate of “net profits” for the archetypes of Ethiopian coffee farms included in the model. This even applies to Ethiopian coffee plantations (archetype 2) even though all their labour is salaried, as we were unable to find published accounts showing their annual net profits (after payment of all costs).

Despite the limitations of data described above, we were also able to analyse the factors that influence the coffee farm income of smallholders in Ethiopia (see below).

Yields, number and age of coffee trees. Because of the diversity of modes of production in Ethiopia (garden, semi-forest, forest, plantation, etc.) it is sometimes preferable to work not in terms of hectares but rather in terms of the number of coffee trees. A prime-of-age, single coffee tree in a garden system is expected to yield around 3.5 kg of cherry – 2.5 kg in “off” years and 4 to 4.5 kg in “on” years.⁷⁸ Meanwhile, an old coffee tree might yield as little as 0.5 kg per year. Trees are tended to intensively in both smallholder and plantation systems.⁷⁹ Ultimately, farm coffee income depends most on the amount of coffee sold (total quantity produced x farmgate price).

⁷⁶ Diro et al. “Cost of Production of Coffee in Jimma Zone, Southwest Ethiopia.” *Ethiopian Journal of Agricultural Sciences* 29, no. 3 (2019): 13–28.

⁷⁷ Fairtrade International. “Fairtrade Living Income Reference Price for Coffee from Ethiopia: Explanatory Note,” July 2023.

⁷⁸ BASIC Interview with Ethiopia coffee sector expert, 15 February 2024.

Ibid.

⁷⁹ According to one interviewee, yields per tree can be higher in semi-forest and small garden systems than on extensive coffee plantations, because the farmers have the time to tend to their trees individually (pruning, weeding, stumping, ...). BASIC Interview with Ethiopia coffee sector expert, 6 September 2023. However, plantations are also known to use intensive agricultural practices with resort to hired labour so as to organize “pruning, mulching and organic fertilizing, stumping, integrated weed and pest management, well-regulated shade and plant density.” BIODEV 3030 et al., “Ethiopian Coffee Sector and Biodiversity: Options and Scenarios of Voluntary Commitments in Favor of Biodiversity by Key Economic Actors in Bale Eco-Region and Southwest Forests,” November 2022.

Choice of processing (dry vs. red cherry). While wet mills have mushroomed in rural Ethiopia in recent years, there is comparatively little uptake,⁸⁰ with great variation by region.⁸¹ Farmers are reluctant to sell red cherries to wet mills because (1) the extra hired labour cost involved⁸² and (2) only “impatient” (usually poorer and smaller) farmers sell red cherries, the remainder keeping their dried cherries as a form of savings/insurance to offset high inflation and negative real deposit rates.⁸³ It is important to underline that coffee farmers are not always free to choose whether they sell their coffee red or dry. Some producers have no choice but to sell naturals, for instance when poor transportation infrastructure makes it impossible to deliver red cherries to a washing station on time (<12 hours after picking).⁸⁴ Other farmers are pushed into selling naturals because the coffee harvest coincides with the harvest of other crops (barley, teff, maize, etc.); for lack of time, they have no choice but to strip their coffee branches (harvesting all cherries in one pass), which makes it complicated to sell red cherries only.⁸⁵

Prices. In February 2020, the Coffee and Tea Authority established a minimum export price for coffee as well as a semi-official floor price for coffee at local selling centres. The minimum export price is calculated daily, based on the global weighted average of the price given to different grades of coffee from different regions.⁸⁶ At the time, the measure raised the price for green coffee by a margin of about 0.5 to 1 USD/lb for Grade 1 (best grade) coffee.⁸⁷ Exporters who sell coffee below the minimum price are subject to legal action from the Ministry of Trade.⁸⁸ Meanwhile on the farmgate side, a semi-official minimum price to be respected by traders at selling centres is announced by local authorities (in at least some regions) on a daily basis.⁸⁹

Coffee quality. As elsewhere in the world, exporters sell high-quality coffee, especially “specialty coffee” that either has a favourable cupping profile or a single, high-value geographic origin, for a higher price. However, it is unclear how much of this value-added is paid back to coffee farmers, and the lack of price transmission may disincentivize the production of high-quality coffees.⁹⁰ Quality profiles are often attached to regions: for instance, “Some regions are well known for the good qualities and achieve a higher price (e.g. Yirgacheffe and Harar) while others get a lower price than

⁸⁰ While the number of farmers saying they have the option to sell red cherries has increased threefold (43% in 2022 against 15% in 2014), the share of the crop that was reported to be sold as red cherries has increased only slightly (19% in 2022 versus 14% in 2014). Beyene and Minten. “Value Addition and Farmers: Evidence from Coffee in Ethiopia.” 2023. There is a similar situation with semi-washed (honey) demucilagers distributed to farmers. See Gurmessa et al., “Sustainability and Gender Dynamics of Coffee Value-Chain Development Intervention,” 2022.

⁸¹ Tamru and Minten. “Investing in Wet Mills and Washed Coffee in Ethiopia: Benefits and Constraints,” Ethiopian Development Research Institute (EDRI), August 2018, p. 12. The uptake in washed coffee varies by region (Ithaka 2020, op. cit., p. 11): for instance washed coffee is well-developed in the south – Sidamo (62% washed) Gedeo (37% washed) Kembata Tembaro (67%) Borena (35%) – and to a lesser extent in Jimma in the West (22% washed), while elsewhere it is widely in the minority.

⁸² 52% more labour per hectare compared to farmers that do not sell red cherries, for the harvest part. This is due to the need to selectively pick red cherries instead of stripping the branches. Tamru and Minten. “Investing in Wet Mills and Washed Coffee in Ethiopia: Benefits and Constraints,” Ethiopian Development Research Institute (EDRI), August 2018, pages 15 and 16.

⁸³ Tamru and Minten. “Investing in Wet Mills and Washed Coffee in Ethiopia: Benefits and Constraints,” Ethiopian Development Research Institute (EDRI), August 2018.

⁸⁴ SudWind. “Impact of Supply Chain Relations on Farmers’ Income in Ethiopia,” October 2020.

⁸⁵ BASIC Interview with Ethiopia coffee sector expert, 20 April 2024.

⁸⁶ Nordic Approach. “Transparency in Ethiopia,” 2020.

⁸⁷ In euros: an increase of 0.93 €/kg to 1.86 €/kg for Grade 1 coffee. Nordic Approach. “Transparency in Ethiopia,” 2020.

⁸⁸ Algrano. “Ethiopia Coffee Harvest Season 2022-23,” 2022.

⁸⁹ BASIC Interview with Ethiopia coffee sector experts, 8 March 2024 and 12 February 2024. According to one interviewee, the semi-official price is the outcome of consultations between local authorities and local traders (akrabis) on the prevailing price. It is reportedly broadcast on the radio and widely known, at least in some regions. We could not confirm whether the practice exists all over Ethiopia.

⁹⁰ SudWind. “Impact of Supply Chain Relations on Farmers’ Income in Ethiopia,” October 2020.

the average (e.g. Jimma and Wolaita).⁹¹ High-quality coffees were said to be purchased at up to 120 to 150 birr/kg red cherry in late 2023,⁹² about four times the farmgate price of Grade 3 coffee.⁹³

Non-coffee income. As noted earlier, if farmers cannot make a living from coffee alone, then they need to diversify their sources of income. This can be through performing off-farm labour, including on neighbouring farms; growing or collecting other crops, spices, firewood or honey; running a small business (shop, transportation service); or remittances from a family member in the city. Dynamics differ from region to region. For instance, whereas in Wolaita region, coffee is a minor source of income for families (20% to 30% of revenue),⁹⁴ in regions such as Sidama, Guji or Yirgacheffe approximately 80% of farm income comes from coffee alone.⁹⁵ On these farms there may be a small garden-style plot with taro, beans, and maize that is consumed by the family itself, but these families are not food self-sufficient, and coffee earnings are used to purchase additional food items. In the Wolaita region by contrast, where coffee is a much smaller proportion of farm income, there will be greater emphasis on annuals that can be eaten by humans, fed to animals, or sold.⁹⁶

Comparison of coffee net income with costs of decent living

While estimates of costs of decent living for rural regions of Ethiopia are available,⁹⁷ they do not provide the necessary data on farmers' current revenue structure to indicate whether the net income from coffee, when supplemented by other sources of income, is sufficient to cover the costs of decent living.

However, the picture of rural Ethiopian coffee-growing regions painted by interviewees and other sources is one in which poverty is common. For instance, an Enveritas study from 2019 that interviewed 13,204 coffee producing households from nine coffee growing regions in Ethiopia found that only 30% to 35% of farmers in the targeted coffee regions are above the United Nation's 2011 poverty line of 3.10 USD (in line with purchasing power parity terms).⁹⁸

3.2. Collection and export level

Estimating the costs of doing business at the collection and export level is challenging, for many reasons. First, the road from farmgate to FOB is incredibly diverse. Value chain actors on this rung of the value chain can include (as in other coffee production countries analysed in this study) small private independent traders, medium-sized independent traders, traders working for international exporters, cooperatives that export, cooperatives that do not export, cooperative unions, international companies, etc. In reality, all these actors have different business models and costs,

⁹¹ Ibid.

⁹² BASIC Interview with Ethiopia coffee sector expert, 16 November 2023. The coffee in question was from the Sidamo region in the Karamo *kebele*; the first winner of the Cup of Excellence contest was from this area.

⁹³ The farmgate price for Grade 3 coffee for the 2023/2024 campaign was around 34.5 birr/kg. BASIC Interview with Ethiopia coffee sector expert, 12 February 2024.

⁹⁴ According to one interviewee, garden coffee in general is associated with a 10% to 30% proportion of farm income that comes from coffee. BASIC correspondence with Ethiopia coffee sector expert, 11 March 2024.

⁹⁵ BASIC Interview with Ethiopia coffee sector expert, 15 February 2024.

⁹⁶ Ibid.

⁹⁷ Fairtrade International. "Fairtrade Living Income Reference Price for Coffee from Ethiopia: Explanatory Note," July 2023.

⁹⁸ Enveritas. "An Assessment of Rural Poverty and Sustainability Indicators in Coffee Growing Regions of South and Southwestern Ethiopia," 3 July 2019.

making it difficult to build a single estimate of costs at this stage of the chain (in this case, the Collection and export stage of the model).

Furthermore, data on this subject is virtually non-existent in the public domain. To our knowledge, there are no official statistical databases on exporter costs, taxes, and net profit margins – only isolated information in academic papers, “grey” literature, or the websites of parastatal agencies that regulate, survey, or are otherwise associated with the coffee sector.

Finally, being an exporter or an importer is all about taking risks and managing uncertainties. Our understanding from interviews is that the core of the work done by exporters and importers is to foresee the high volatility of the coffee market, make stocks, lose money on sales sometimes and make money at other times, trying to equate profits of sales with the costs of borrowing capital. In our understanding, only a national statistical agency with the power to hold confidential and exhaustive business data could make a statement on profit levels and taxes of coffee exporters.

For Ethiopia, we were able to obtain an estimate of individual costs to exporters⁹⁹ – see pie chart in Figure 5 – but not taxes and net profit margins. We know only that the total value-add from farmgate to FOB for conventional coffee is approximately 0.20 euros/kg. This very narrow value-add at the collection and export stage appears to reflect the situation described above, where farmers capture a significant portion of the FOB price (here estimated at 94%) while many exporters operate at a loss on the coffee side of their business.

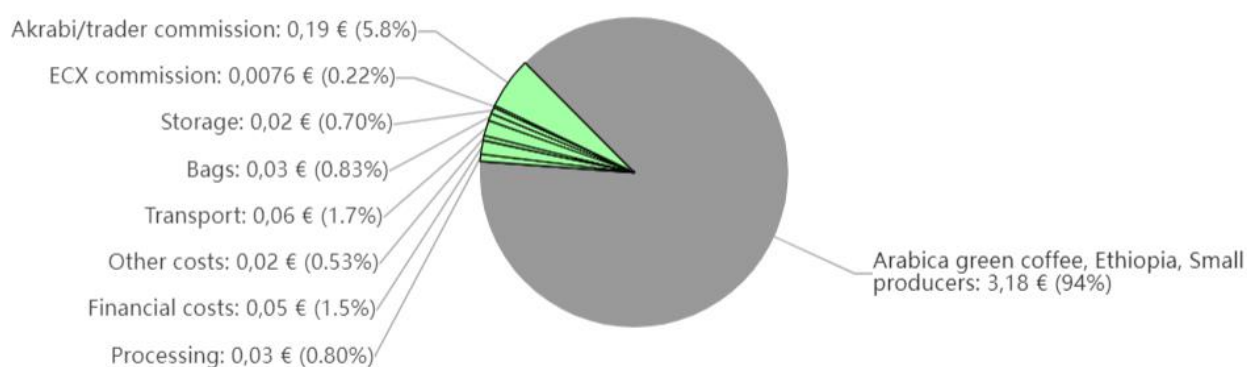


Figure 5. Distribution of costs for collectors and exporters of Ethiopian coffee. Source: BASIC, based on bibliography and interviews (2023)

3.3. Certifications: Rainforest Alliance

The historical certifications in Ethiopia are Rainforest Alliance, Fairtrade, and Organic.¹⁰⁰ Rainforest Alliance and Fairtrade include a premium that is paid either to the producer (for the former) or to the cooperative (for the latter). Figure 6 shows the distribution of value between Rainforest Alliance coffee at the export stage on the right, compared to non-certified coffee on the left. In the Rainforest Alliance scenario, farmers earn 0.14 euros/kg more than non-certified farmers for total farm income, thanks to the Rainforest Alliance premium on Arabica coffee.

⁹⁹ Ithaka Coffee. “Focus On Costing,” 3 April 2020. <https://www.coffeeithaka.com/2020/04/03/>.

¹⁰⁰ TEEB. “Protection of Biodiversity through Coffee Certification? The Case of Forest Coffee in Bench Maji and Kaffa Zone, Ethiopia,” 2010.

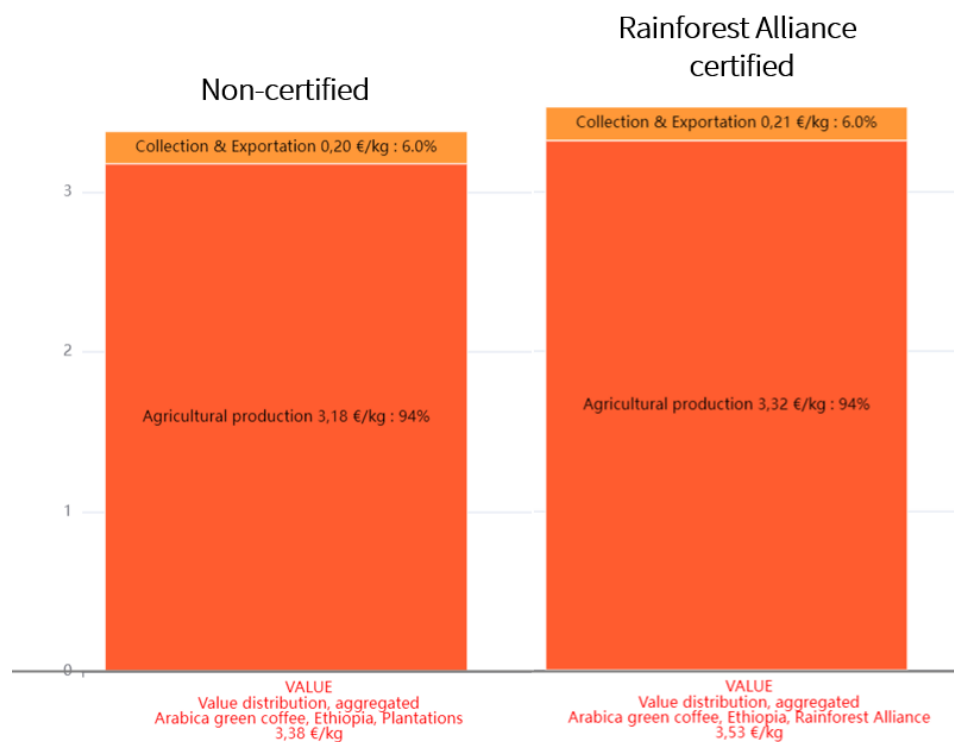


Figure 6. Distribution of value for non-certified (left) and Rainforest Alliance certified coffee sourced from Ethiopia, for plantations or large cooperatives (in red) and collectors and exporters (orange). Source: BASIC, based on bibliography and interviews (2023)

One interviewee suggested that the Rainforest Alliance was more likely to be obtained by larger farms or cooperatives which achieve economies of scale, because the return on investment for a smallholder was not sufficient to warrant obtaining the certification.¹⁰¹ In a 2018 study, the analysis of data published by Fairtrade International and Rainforest Alliance showed that members of Fair Trade Certified cooperatives have very small holdings close to the Ethiopian average and below-average yields, whereas Rainforest Certified producers are "entrepreneurial farms" specialized in coffee growing, which they cultivate on average areas ranging from 2 ha to 7 ha.¹⁰²

At the exporter level, there is almost no change to the cost structure of collectors and exporters. The only difference is the addition of certification and traceability costs, which are evaluated at less than 0.01 euros/kg. As was the case for conventional coffee, we do not have taxes or net profit margin information for exporters.

¹⁰¹ BASIC correspondence with Ethiopia coffee sector expert, 26 March 2024.

¹⁰² BASIC Coffee: The Hidden Crisis Behind the Success Study on Sustainability Within the Coffee Industry, 2018.

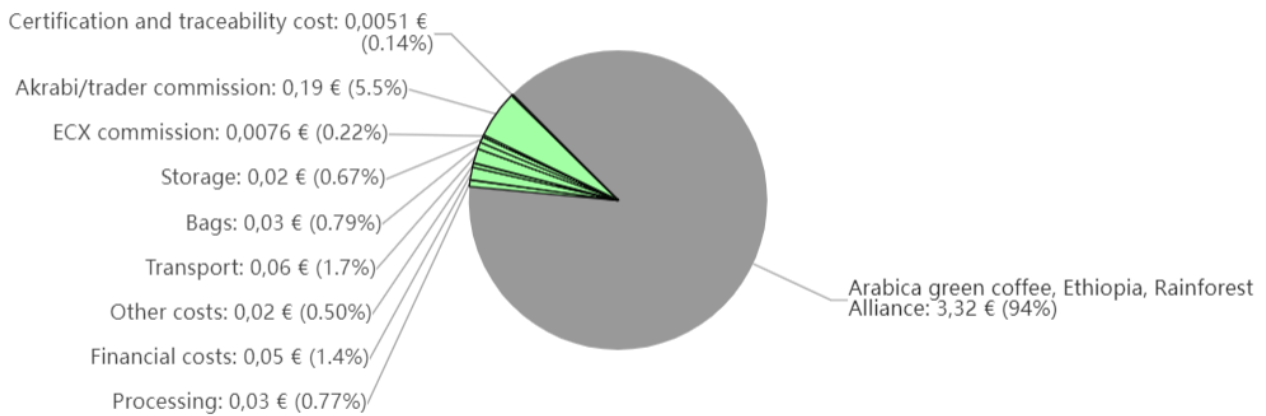


Figure 7. Distribution of costs for collectors and exporters of Ethiopian Arabica coffee in 2021. Source: BASIC, based on bibliography and interviews (2023)

Because Organic is outside the scope of this study and is always partnered with Fairtrade in Ethiopian coffee sold on the German market, the double Fairtrade-Organic certification is not included in the model. However, much of Ethiopia’s coffee is produced in *de facto* organic conditions, as discussed above, with or without an Organic certification.

Whether or not certifications are “worth it” economically for farmers is an open question. As in other countries, much coffee that is produced under certified conditions is not sold as such, which means that the farmer may not recuperate his or her costs of certification.¹⁰³ Further, implementation of voluntary sustainability standards (VSS) is hampered by higher production/certification costs relative to benefits, and lack of skilled leadership; while certified farmers do receive second payments and dividends, it is expected that uptake is higher amongst commercial farms than amongst smallholders.¹⁰⁴

¹⁰³ SudWind. “Impact of Supply Chain Relations on Farmers’ Income in Ethiopia,” October 2020.

¹⁰⁴ Minten et al. “Tracking the Quality Premium of Certified Coffee: Evidence from Ethiopia,” 2018.