

Coffee Production in Ethiopia: A call for renovation and rejuvenation

Scoping Study

November 2025



Foreword and acknowledgement

The Food and Land Use Coalition (FOLU) is a global community of innovators and experts working to advance sustainability, equity and resilience in food and land use systems. United by a shared vision of rapid and transformative change, this network of seven country platforms (Brazil, China, Colombia, Ethiopia, India, Indonesia, and Kenya), eight key international partnersⁱ, and over 50 Ambassadors, strives for a world in which food and land use systems enable people and nature to prosper. Created in 2017, FOLU advances diversity, embraces disruptive thinking, and forges consensus through an evidence-based approach. The coalition empowers farmers, policymakers, businesses, investors, and civil society to unlock collective action at scale.

The Food and Land Use Coalition in Ethiopia (FOLU Ethiopia), in collaboration with various coalition members and stakeholders of coffee production in Ethiopia, including the finance sector, are exploring innovative ideas for a sustainable coffee production in the country. This report explores the current state of coffee production in Ethiopia and analyzes the potential for coffee renovation and rejuvenation, including its implications for smallholder coffee farmers.

FOLU is grateful to Norway's International Climate and Forest Initiative (NICFI), for the financial support provided. It is in collaboration with the Ethiopian Coffee and Tea Authority (ECTA), FOLU Ethiopia has commissioned the study from Storiⁱⁱ and the organizations have jointly developed this report.

We would like to thank the many individuals and institutions that have generously contributed time and energy to this work. This includes diverse consultations with national and international organizations, investors, donors, and program managers as well as contributions from coffee production stakeholders and participants of a validation workshop in Addis Ababa in March, 2024. Their different perspectives enriched this scoping study and resulted in the development of a concept proposal for a national funding facility for coffee renovation and rejuvenation.

Furthermore, the authors acknowledge the suggestions from reviewersⁱⁱⁱ and Food and Land Use Coalition (FOLU) colleagues, both in Ethiopia and secretariat offices which have helped shape the final version of this scoping study.

The contents and opinions expressed herein are those of the authors (FOLU Ethiopia and Stori) and do not necessarily reflect the views of the associated and/or supporting institutions. The usual disclaimer applies.

i AGRA, EAT, Global Alliance for Improved Nutrition (GAIN), Sustainable Development Solutions Network (SDSN), SYSTEMIQ, World Business Council for Sustainable Development (WBCSD), World Farmers' Organisation (WFO) and the World Resources Institute (WRI).

ii Stori's team was led by Franklin Riboud and included the participation from Iván Stola, Tsion Lemawossen Demissie, and Tadesse Woldemariam Gole.

iii External reviewers we wish to thank include Gashaw Abate from IFPRI, Ben Cohen from WBCSD, Mauricio Benitez from Big Valley as well Dawit Ayele from Growth Capital Analytics.

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Executive Summary



Background

Ethiopia, as the birthplace of Arabica coffee and Africa's largest coffee producer, holds a critical position in the global coffee market. The sector contributes 30–35% of Ethiopia's export earnings, supports the livelihoods of 25% of the population, and plays a vital role in the country's culture and economy. However, the industry faces significant challenges, including low productivity. Smallholder coffee farmers, who grow coffee on plots of land smaller than two hectares, harvest 95% of the coffee produced in the country. Most of them depend on

coffee production for their sustenance. Yet, most of them produce coffee using traditional techniques with limited adoption of good agronomic practices. Many of them live below the poverty line. Climate change and diseases are increasingly affecting coffee farms. The sector is also faced with stringent compliance from international regulations as well as volatile prices from international coffee markets. Addressing these issues is essential to ensuring Ethiopia's continued prominence in the global coffee trade and improving the livelihoods of its farmers.

Renovation and rejuvenation programs as key drivers for improving yields

This scoping study identifies renovation and rejuvenation as the cornerstone strategy to revitalize Ethiopia's coffee sector. Approximately 80% of coffee farms are overdue for interventions such as replanting and stumping, which could increase national production by up to 80% when combined with good agricultural practices. Implementing such a strategy stands not only to increase yields, but also farmers' income, as well as improve the resilience and the sustainable growth of the coffee production

sector. Additionally, by increasing productivity this strategy also increases the value of existing coffee plantations and thus can help curb deforestation.

Despite its transformative potential, implementing this strategy poses significant challenges, including relatively high cost and multi-year investments, as well as the complexity of implementing a strategy across a fragmented value chain. Additionally, coffee farmers face systemic barriers accessing relevant finance, inputs, and technical assistance.

Financial implications for a typical farm in Ethiopia

Renovating and rejuvenating coffee plantations has several financial implications at the farm level. It requires financing – to cover costs of inputs and the income loss that occurs while the stumped or newly planted trees become productive again. As such, it is essential to demonstrate that the investment is

ultimately a profitable one – so that farmers can repay their loans as the production level goes up.

Taking the example of an archetypal farm of one hectare, an intervention on 25% of that parcel is considered with a mix of trees replanted and stumped. The costs incurred for that farm are estimated at US\$

2,750. Following a period of decreased production that will last three years, production levels will rapidly resume and surpass previous levels, allowing a loan to be repaid progressively over a six-year period. Once the loan is repaid, the farmer will then wholly benefit from the increased production value until the

next cycle of renovation and rejuvenation. Increased production^{iv} for a period of 10-year is estimated to represent US\$ 5,550. The return on investment over this period is more than 100%, representing a highly profitable investment.

A complex macroeconomic context and coffee value-chain challenges

Ethiopia's socio-economic challenges, including persistent inflation, foreign exchange shortages, and fiscal imbalances, create a difficult environment for the coffee sector. Government revenues have not kept pace with expenditures, resulting in increased domestic borrowing and inflation. Limited access to international financing, exacerbated by a stagnation in export performance, has further strained Ethiopia's economic stability. Liquidity constraints have particularly impacted the banking sector, microfinance institutions, and stakeholders in the coffee value chain, making it difficult to secure credit for working capital or attract foreign investments.¹

In addition, coffee production is embedded in a complex value chain. The Ethiopia Commodity Exchange is meant to provide centralized trading services to enhance market access for coffee producers. However, reforms aimed at enabling direct trade and improving international market access have largely fallen short as smallholders still struggle with low production volumes, limited global market knowledge, and inadequate processing capabilities. Farmers typically earn just 60% of the export price, significantly less than producers in other coffee-exporting countries.

The role of institutions to offer micro-loans and the type of financing needed

Microfinance institutions, with 47 entities serving millions of clients in the country, play vital roles in providing financial services to a large portion of the population. Coffee cooperatives, beyond the technical support and processing services they provide to farmers, also support their members with financing. However, challenges such as low repayment rates, liquidity constraints, and weak infrastructure hinder these organizations' effectiveness. Strengthening collaborations between microfinance institutions and cooperatives, alongside addressing gaps in education, finance, and infrastructure, is critical to maximizing their impact.

Furthermore, the existing financial products farmers can access are poorly suited to their needs, offering short-term loans tied to single harvest cycles and imposing strict collateral requirements. In order to be attractive to farmers and fit with the type of investment they need in their coffee farm, financing requires long-term commitments with terms extending

beyond five years, interest rates commensurate with the level of inherent risk, as well as appropriate grace periods. Comprehensive solutions must combine loan-based and grant-based programs, leveraging blended finance to attract investments from both public and private sectors. Effective financing mechanisms should also be accompanied by support for essential inputs and capacity building.

Initiatives like the Oromia Forested Landscape Program and EU-Coffee Action for Ethiopia offer valuable lessons, but scaling these efforts will require more comprehensive and tailored financial products and partnerships across the value chain. Ethiopia's ongoing economic reforms, including new policies to attract foreign investment and foster competitive financial markets, hold promise for improving access to financing.

iv As compared to a scenario where the farmer neither stumps nor replants trees.

Paving the way for increased productivity and improved livelihoods

Ethiopia's coffee sector is of critical importance, not only as a cultural heritage but also as a cornerstone of the national economy and a vital source of livelihoods. Despite its potential, the coffee production sector faces persistent challenges, including low productivity, climate change impacts, pests and diseases affecting trees, as well as compliance with international regulations. Inadequate access to finance, insufficient access to inputs, and insufficient knowledge further exacerbates these challenges for smallholder coffee farmers. Addressing these challenges requires a comprehensive intervention towards renovating and rejuvenating coffee farms, combining improving access to credit while also building the capacity of farmers to employ good agricultural practices.

To catalyze such interventions, this study recommends exploring the establishment of a dedicated fund to support smallholder

coffee farmers. This fund would provide much-needed financial support and technical assistance for the renovation and rejuvenation of coffee farms, drawing on contributions from agronomists, development partners, as well as national and international actors in the lower part of the value chain.

By fostering coordinated investment and innovation, the fund has the capacity to unlock the sector's potential and drive long-term and sustainable growth. Further exploration and stakeholder consultation are essential to define the fund's structure, governance, and operational priorities, ensuring it effectively addresses the unique needs of Ethiopia's coffee sector.

1

Introduction



Coffee holds a unique and central place in Ethiopia's economy, society, and culture. As expressed by a high-level Ethiopian government representative: "Coffee (...) is the country's main source of income and an integral part of society. Investing in the sector is also supporting the country at large."

Ethiopia is considered the birthplace of Arabica coffee and is Africa's largest coffee producer. The country ranks third globally in Arabica coffee production and fifth in Arabica coffee exports, with annual export revenues of around US\$1.4 billion.² Coffee constitutes 30-35% of Ethiopia's export earnings (ibid). More than six million smallholder farmers cultivate coffee, directly or indirectly supporting the livelihoods of as much as 25% of the population (ibid). Beyond its cultural and economic significance, coffee cultivation in Ethiopia is also connected to improved food security.³

Despite its importance to the global coffee industry, Ethiopia's coffee sector faces critical challenges. Productivity is low mainly because of aging old coffee trees and limited adoption good agricultural practices. Smallholder farmers, who grow coffee on plots of land smaller than two hectares, harvest 95% of the coffee produced in the country. Many of these farmers live below the poverty line. Climate change and particularly rising temperatures are affecting coffee farms in lower-altitude areas. Additionally,

regulations on deforestation limit expansion of agricultural areas, while also increasing the administrative and logistical burden on the coffee value chain.

The Food and Land Use coalition (FOLU) promotes sustainable food and land use systems that would help to accelerate economic development. It observes that unsustainable agricultural practices come at a cost to nature, the climate, and people. Not only is it a key driver of deforestation, biodiversity loss, water degradation, but current food production systems are responsible for a third of global greenhouse gas emissions; and millions remain hungry and malnourished, while millions of smallholder farmers are locked into poverty. Through its platform in Ethiopia, FOLU provides policy recommendations and actions to transform food and land use system in the country. Focusing particularly on coffee production, it has sought to improve the productivity of the country's smallholder coffee farmers as well as their livelihoods. In doing so, FOLU Ethiopia also expects to contribute to the protection and restoration of forestland.

This scoping study leverages FOLU's and other stakeholders' knowledge to analyze Ethiopia's coffee sector, identify its main challenges, and assess opportunities for meaningful development.



2

Challenges and opportunities for coffee production in Ethiopia



2.1 The coffee productivity challenge in Ethiopia

With yields per hectare lagging considerably behind other leading coffee-producing nations, Ethiopia's coffee productivity is about 75% lower than Vietnam's, 56% lower than Brazil's, and 22% lower than Colombia's.⁴

Table 1. Green coffee production indicators for leading producers (2021)

Country	Production (tons)	Area (Ha)	Yield (ton/Ha)
Brazil	2 993 780	1 836 741	1.6
Vietnam	1 845 033	653 192	2.8
Colombia	754 620	840 112	0.9
Indonesia	765 415	1 249 615	0.6
Ethiopia	456 000	685 294	0.7
Uganda	374 760	692 553	0.5
India	334 000	422 924	0.8
Honduras	400 674	336 318	1.2
Peru	365 582	454 717	0.8
Mexico	174 341	641 799	0.3

Source: ⁵

A significant contributor to the relatively low productivity of Ethiopia is its old coffee trees and limited adoption of good agricultural practices, including the limited use of renovation and rejuvenation (R&R), weeding, and pesticides and nutrients.^{6,7} The high prevalence of disease in coffee trees is another primary challenge to productivity gains.⁸ Between 1995 to 2017, Brazil and Vietnam benefited from advanced mechanization, selective breeding, and irrigation technologies. These factors alone resulted in yield increases of 30% and 100%, respectively.⁹ During that period, Ethiopia's yield stagnated at around 0.7-0.8 tons/ha, with diseases causing potential losses of up to 57 percent.¹⁰

The slow adoption of improved agronomic practices is partly due to Ethiopia's coffee being grown in

diverse settings: from forest coffee, grown naturally in primary forests, to garden coffee, grown on small plots of land adjacent to dwellings.¹¹ In addition, most of the coffee that is grown in the country relies exclusively on rainfall irrigation.^{12,13}

Farmers who produce coffee on plots of land smaller than two hectares account for 95% of the nation's total coffee production. Most of these farmers have received limited training on improved practices and they perceive higher risk associated with changing from their traditional farming practices. Even the ones who are aware of the benefits in terms of productivity and income often lack the means to acquire necessary inputs and technologies.

This situation prompted initiatives such as the Agricultural Growth Program (AGP), implemented between 2011 and 2019, which supported the establishment of coffee nurseries and pulping stations, as well as the training of farmers and the expansion of cultivation areas.¹⁴ However, despite these efforts,

the uptake of improved coffee production practices remains relatively low in Ethiopia. The Coffee Initiative reports a 6% baseline adoption rate of Good Agricultural Practices (GAP) among Ethiopian coffee farmers, significantly trailing behind Kenya's 34% and Rwanda's 40% adoption rates.¹⁵

2.2 Environmental implications of low coffee yields

Ethiopia has a long-standing tradition of cultivating coffee in environmentally mindful systems, often under the shade of indigenous trees and with minimal reliance on external inputs. These traditional methods help maintain soil fertility, preserve biodiversity, and protect watersheds.

Despite this heritage, low coffee yields – combined with factors such as climate shifts, disease outbreaks, and volatile global prices – have prompted some farmers to clear land and expand plantations into previously forested areas. As was shown by a study of land use changes in southwestern Ethiopia, small-scale agriculture, firewood collection, and charcoal production were among the major direct drivers of the land use and land cover change that occurred between 1994 and 2021 in the region.¹⁶ This expansion has been accompanied by the adoption of alternative cash crops, such as khat, which are often more profitable and less labor-intensive. For example, khat production in Ethiopia increased by 220% between 2015 and 2020¹⁷, driven in part by strong domestic demand – coffee production increased by 15% during that same period. Contrary to this push to turn forests into agricultural land, coffee trees benefit from growing within forested areas: it has been demonstrated that trees perform better in shaded areas.¹⁸

This shift away from coffee diminishes Ethiopia's overall coffee output and erodes the sector's resilience. Reduced investments in coffee cultivation limit the demand for diverse Arabica seedlings, ultimately narrowing the genetic base necessary for disease resistance.¹⁹ Furthermore, once farmers switch to khat and clear forested land, returning to coffee becomes increasingly difficult—especially under emerging international environmental standards. The EU Deforestation Regulation (EUDR), for instance, compels coffee importers to verify that their beans are not sourced from recently deforested areas, effectively barring those sites from premium coffee markets.

Despite these pressures, Ethiopia's coffee sector is working to comply with the EUDR and other sustainability requirements so that it can continue exporting to key markets like Europe. By boosting productivity on existing farmland rather than expanding into forested areas, Ethiopia can both preserve its markets and protect vital ecosystems.



2.3 Renovation and rejuvenation as a key driver for improving coffee yields

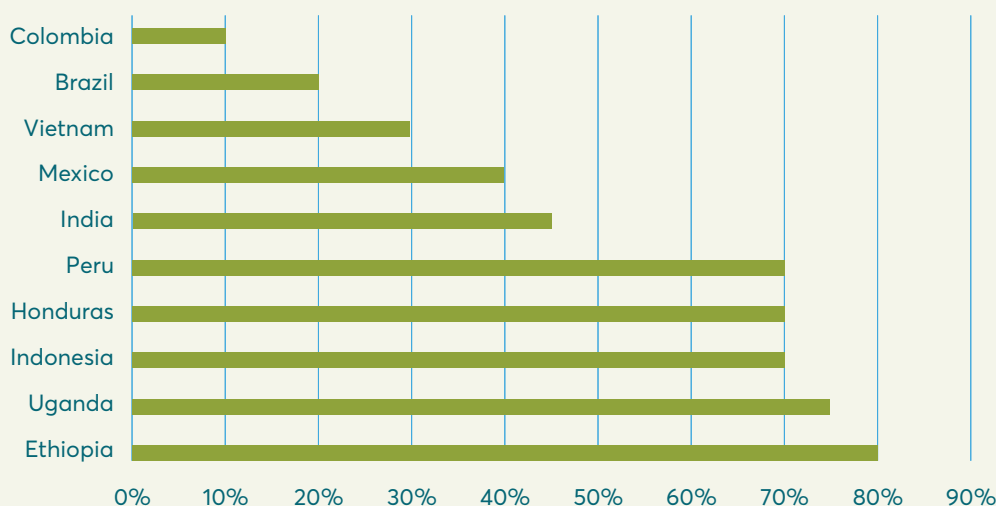
Ethiopia's generally old coffee trees and their low productivity open the prospect of Renovation and Rejuvenation (R&R). Renovation involves planting young coffee trees into the existing stand. This includes both replanting seedlings in lieu of aged trees, as well as infill planting, where new plants are added within the existing stand to increase density. Rejuvenation, on the other hand, involves the stumping of existing trees. It entails cutting old coffee trees at their base for complete revitalization or strategically pruning older or less productive branches to stimulate vigorous new growth, prolong the tree's lifespan, and improve overall coffee yields.

R&R are tree maintenance practices that are integral

to maintaining and improving the yield and resilience of coffee.²⁰ However, these techniques need to be coupled with Good Agricultural Practices (GAP) to improve yields over a coffee tree's lifecycle. Indeed, while a coffee tree's peak-production decreases with time after 10-15 years, specific practices such as rejuvenation cycles every 10 years, can drastically boost yields in the later part of a coffee tree's life.²¹

It is estimated that approximately 80% of the current Ethiopian coffee trees is aged and would benefit from R&R.²² In a comparative analysis of R&R needs among the world's ten largest coffee-producing countries, Ethiopia emerged as the nation with the greatest need for R&R (Figure 1).

Figure 1. Percentage of coffee area in need of R&R in top ten coffee-producing countries

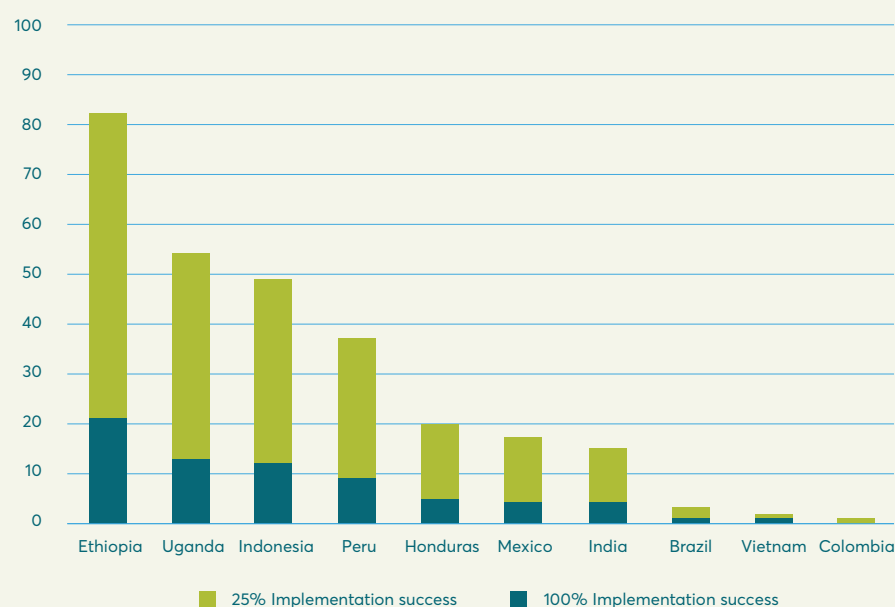


Source: ²³

The maximum potential for applying R&R suggests that the total national coffee supply in Ethiopia could rise by as much as 80% if R&R and GAP are together implemented across all Smallholder Coffee Farmers' (SHCF) lands.²⁴ However, most programs and stakeholders recommend conducting R&R on only a fraction of the land at once: USAID's guide on R&R mentions 10-20% of the farm area. Considering the need to avoid significantly disrupting production,

reducing financial risk for investors and for farmers, and focusing on trees most in need of R&R led to consider an initial intervention on 25% of the land. At the farm level, considering a 25% implementation would represent an increase of close to 25% of the total farm's yearly production.

Figure 2. Growth potential of national coffee supply with R&R investment scenarios in top coffee-producing countries



Source: ²⁵

2.4 The challenges of implementing R&R

Despite the clear benefits, implementing R&R is complex and costly. Direct costs (labor, tools, and inputs) range from US\$3,000 to \$5,000/ha in Latin America.²⁶ Furthermore, many programs overlook indirect costs, including financing costs and farmers' lost income during non-productive periods following tree stumping or replanting. Furthermore, the cost of technical assistance, not only training farmers to introduce GAP but also encouraging them that it is in their best interest to perform R&R, is an essential part to consider.

Experiences from other countries demonstrate that the success of R&R programs rest on providing solutions to four key challenges for SHCFs: their lack of the appropriate means to bear income losses, inadequate access to financing, insufficient access to inputs, and insufficient knowledge.^{27 28} Interviews with SHCFs in Ethiopia confirm that farmers are open to R&R if income loss compensation, financing, tools, and technical support are made available.

- **Means:** R&R entails a production drop during the initial years post-intervention. Indeed, a stumped tree may not produce coffee for at least two years, while a recently planted seedling will likely need three years to bear fruits. Completing R&R in cycles (about 25% of

the farm at a time) minimize the effect of this initial drop, but farmers' income will still decline during this period. Since many of the SHCFs are living at sustenance level, if they are not compensated for this temporary loss, most will be unable to participate.

- **Finance:** Access to affordable, long-term credit is critical. Currently, when microfinance institutions agree to lend money to a SHCF, the money is lent for at most one year. While this can help farmers meet immediate needs, this is incompatible with making productivity-enhancing investments on coffee farms. Such investments typically require four to five years to break even.
- **Inputs:** An intervention requires seedlings, compost and manure, tools, and sometimes hired labor. Established seedling distribution channels and relationships to cooperatives are therefore crucial. Some existing programs, like the Oromia Forested Landscape Program²⁹, couple stumping promotions with the provision of tools.

- **Technical assistance:** is not only necessary to teach targeted agronomic practices, but it is also needed to make SHCFs aware of the benefits of R&R and encourage them to participate in the program. It can also be

used to support farmers through the financing processes as well as support other stakeholders, such as service providers, cooperatives, and local banks.

2.5 Financial implications for a typical farm performing R&R in Ethiopia

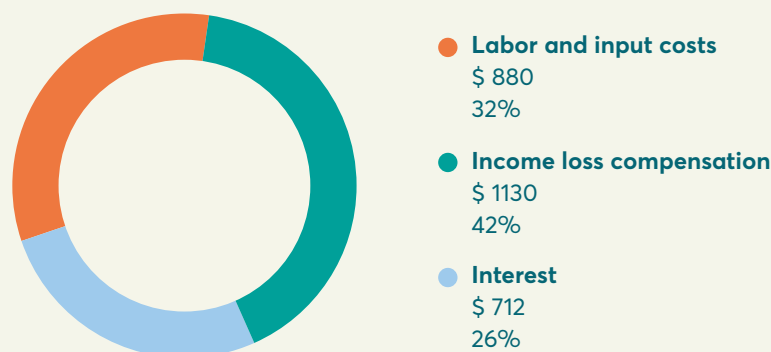
Making R&R investments represents a critical effort at the farm level³⁰, and it is important to ensure that the return-on-investment in Ethiopia is not only positive but also sufficiently attractive for farmers. This section estimates the costs and benefits of R&R at the farmer level, using the example of an archetypal farm. In doing so, it also estimates the financing requirements of the R&R investment for that farm. The assumptions used are based on survey data from different woredas (administrative units) and the data coherence was confirmed through literature reviews and interviews.

The archetypal Ethiopian coffee farm used for this example has a size of one hectare, where trees are more than 20 years of age, and yield is just below the national average. Implementing R&R assumes that an initial intervention is carried out on 25% of that parcel, with a mix of trees being replanted and others being stumped, in line with lessons learned from other programs to limit risks. Renovating an entire farm at once poses a disruption, also increasing the risks for both the farmers and financiers. Performing R&R on

a quarter of the farm allows all stakeholders involved to learn from the process. Although subsequent interventions can be expected to extend that within the same plot, this section will focus on one initial cycle of R&R.

At the farm level, the costs considered include the purchasing of tools, nutrients, seedlings, and paying for hired labor. Additionally, the non-productive period following the stumping or planting of trees represents an opportunity cost for farmers. This period includes the two to three years following their investment when the trees planted or stumped do not bear any fruit. This represents a loss for farmers which will need to be financed for them to make the investment: it is referred to as “income loss compensation.” Finally, financing this investment will also bear a cost, the interest on the loan,^v which is included in the estimation below. Incorporating the initial investment cost, the loss of income, and the financing, we estimate the total costs incurred to perform R&R on 25% of the archetypal coffee farm of one hectare to represent approximately US\$ 2,750.

Figure 3. Estimated costs incurred at farm level to perform R&R on 25% of an archetype Ethiopian coffee farm of 1 Ha



Source: analysis of modelled archetype Ethiopian coffee farm of 1 Ha

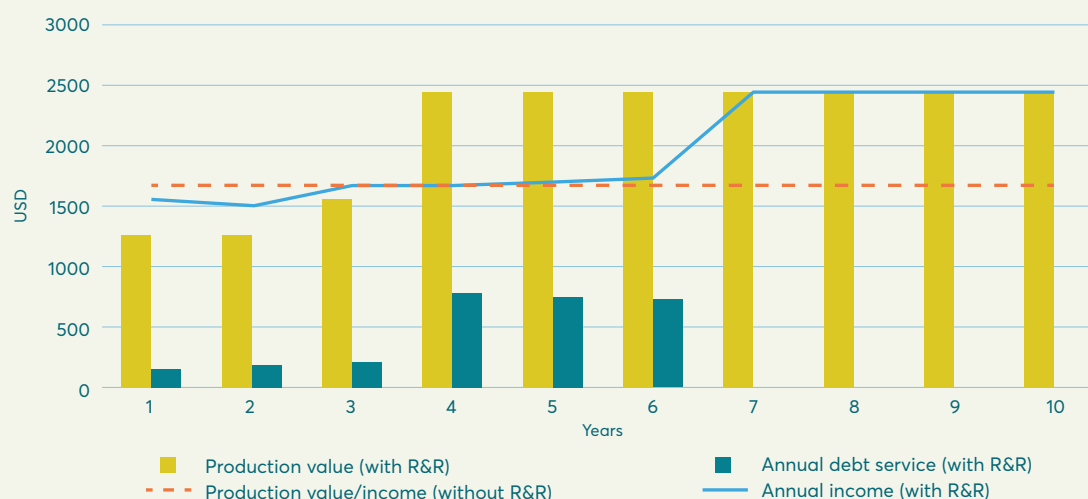
^v The calculations assume a 10% loan that is disbursed progressively over the initial grace period of 3 years, and is fully repaid in year 5.

On the benefits side, smallholder farmers can anticipate a substantial increase in yield and profit. Using differentiated projections for replanted and stumped trees, the archetypal farm is expected to grow its production progressively from year three onwards. Having renovated 25% of its coffee area, this farm can expect its production per harvest to increase by 46% from year four, compared to its production level before the intervention. In a 10-year timeframe from the time the R&R intervention is made, this represents a cumulative difference in the farm's production value of US\$ 5,550, compared to

the farm not engaging in R&R.

Figure 4 below compares the projected yearly production value of the archetypal farm undertaking R&R on 25% of its land with a baseline scenario (i.e., without R&R) of constant production. It also illustrates the anticipated debt service – both principal and interest – that the farmer will need to pay if they borrow funds to cover upfront costs and offset the temporary loss of income of the initial years. Finally, it presents the expected effect on farmers' income from year four onwards.

Figure 4. Estimated production value, debt service, and income at farm-gate once R&R is performed on 25% of an archetypal coffee farm of 1 Ha



Source: analysis of modelled archetype Ethiopian coffee farm of 1 Ha

Comparing the estimated benefits with the estimated costs for making and financing the investments, R&R appears a profitable investment at farm-gate: investing US\$ 2,750 yields at least US\$ 5,550 on 25% of an archetypal coffee farm of 1 Ha, representing a return on investment of more than 100% over the 10-year period.



3

Socio-economic context, coffee value chain and financing challenges in Ethiopia



3.1 A complex macroeconomic context

The Ethiopian socio-economic landscape presents its own set of challenges affecting the development of financial mechanisms suitable for SHCFs and R&R. In recent years, the economic situation has been marked by increasing fiscal challenges and macroeconomic distortions, sustained inflation by around 30% per year, foreign exchange shortages, and fiscal imbalances. The government's revenues have not kept up with the growth in expenditures, especially considering the significant public investments made in the last two decades. This disparity has led to rising debt sustainability concerns, particularly regarding dollar-denominated debt, which has limited the government's ability to secure international financing. Consequently, Ethiopia has more relied on domestic borrowing, which resulted in the expansion of the money supply, increasing inflation.³¹

The lack of foreign exchange is a critical issue and can discourage foreign investors. Despite the government's initiatives, such as the Homegrown Economic Reform Program, and its policies to attract foreign direct investment (FDI), challenges persist. The economy has experienced a slowdown in export growth, a critical source of foreign currency, relative to GDP expansion, falling short of the objectives outlined in the government's Growth and Transformation Plan.

Liquidity concerns have also had significant implications for the economy, limiting business activities and government operations, especially in international trade, foreign investments, and financial transactions.³² For instance, the challenges have put pressure on the banking sector, which is now facing a liquidity crisis, mainly due to political instability and sustained high inflation, which led to a higher demand for credit and a rise in loan default rates.³³ Moreover, this situation is exacerbated by

a progressive decline in repayment rates of loans, especially in microfinance services.

Ethiopia's coffee sector is deeply intertwined with the country's broader macroeconomic conditions, making it highly susceptible to financial constraints and instability. By representing the top exported commodity, the coffee sector is particularly affected by currency regulations (including convertibility and repatriation). Also, liquidity concerns make credit less available for stakeholders of the coffee value chain to finance their working capital requirements, thereby threatening operations. Finally, foreign investors, who could bring much-needed capital, technical know-how, and infrastructure to the coffee sector, may be deterred by Ethiopia's challenging foreign exchange environment and frequent policy shifts.

The coffee sector must also contend with high price volatility. These fluctuations are not only influenced by the international coffee prices but are also exacerbated in Ethiopia due to the challenges that foreign exchange markets face. In recent years, a notable decrease in the average price at which coffee was sold year-on-year — dropping from 65-105 Ethiopian Birr (ETB; free on-board pricing at farm gate for red cherries per kilogram) in 2022 to just 25-40 ETB in 2023.³⁴ In 2024, the international price of coffee surged by as much as 73%. Such market instability affects the income of farmers, while production costs tend to grow steadily, following inflation.

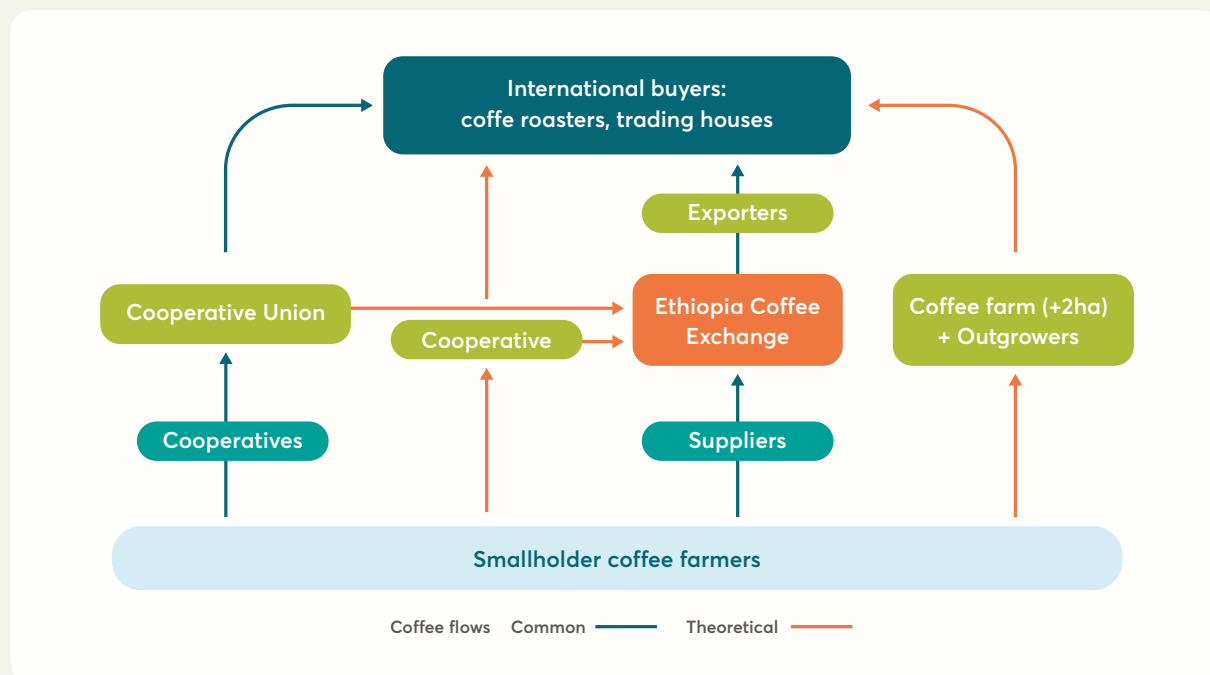
3.2 The Ethiopian coffee value chain

The Ethiopian coffee value chain is shaped by its unique market structure and a fragmented value chain (Figure 5). Ethiopian coffee production is a vital export crop that significantly contributes to the national economy, while also catering to a robust domestic market rooted in the country's longstanding coffee culture. More than half (58%) of the coffee

produced in Ethiopia is exported.³⁵

The Ethiopia Commodity Exchange (ECX) plays a critical role by providing centralized trading services such as warehousing, quality grading, and market information sharing. These services aim to enhance market access and pricing opportunities for SHCFs.

Figure 5. Schematic of export coffee value chain in Ethiopia



Source: Adapted from ³⁶

Reforms introduced in 2017 sought to enable direct trade for all coffee producers and facilitate better access to international markets and financing. However, the reforms largely failed to achieve their objectives, as international buyers continued to engage directly with exporters rather than utilizing the ECX. Smallholders have struggled to benefit from these reforms due to limited production volumes, inadequate knowledge of global markets, and the lack of processing capabilities. Most smallholders depend on cooperatives, exporters, or NGOs to process and market their coffee. Larger producers, while allowed to export directly, seldom do so.³⁷

Smallholders currently receive about 60% of the export price, much lower than producers in other countries like Colombia or Brazil, who receive 87%.^{38 39} Value addition in the supply chain, such

as processing cherries into green coffee, happens outside farm gates, depriving farmers of higher prices. This limits smallholders' ability to profit from higher bargaining power and secure a greater share of export revenues.

Farmers face additional challenges in choosing between selling to traders or cooperatives. Traders, although more accessible^{40 41}, typically offer lower prices, while cooperatives, which provide better margins through collective bargaining, are often difficult to access due to logistical constraints.⁴² SHCFs often have low bargaining power and they lack critical market information.⁴³ Improving the capacities and accessibility of cooperatives offers prospects of increasing SHCFs' incomes and addressing structural inequities in the Ethiopian coffee value chain.

3.3 Access to finance, the role of micro-finance institutions and cooperatives

Over the past decade, the number of financial institutions (e.g., banks, micro finance institutions, insurance companies) in Ethiopia has grown consistently with the expansion of the national economy, as has their geographic and demographic reach.

However, Ethiopia's SHCFs and agricultural enterprises face significant challenges in accessing resources and financial support, including for R&R efforts. Among them, there is often a lack of aggregation points for distributing funds and inputs.⁴⁴ Key intermediaries, including cooperatives, micro, small and medium enterprises (MSMEs), coffee plantations, exporters, and NGOs, play a critical role in addressing this gap.

Compared to Ethiopia's commercial banks, microfinance institutions and rural savings and credit cooperatives comparatively have a higher presence in rural areas. However, they still struggle with their limited financial and technical capacity to secure capital to serve this financing demand by rural customers and to offer innovative products.

Although some project and public funding have been provided and R&R-targeted programs have been in place, these initiatives have not been comprehensive enough in scope and large enough in scale to significantly affect the coffee sector. Existing programs typically provide grants, tools, and trainings; but none have focused on giving farmers access to long-term finance for investments such as for coffee R&R.

Microfinance Institutions (MFIs) are integral to extending financial services to SHCFs, with 56 institutions and a total of 1,138 branches were operating in Ethiopia serving 4.5 million clients as of June 2024, holding a combined capital of \$60 billion Ethiopian Birr (ETB).⁴⁵ These MFIs provide savings, loans, micro-leasing, insurance, and money transfer services. Additionally, over 21,000 Savings and Credit Cooperatives (SACCOs) in Ethiopia cater to 5.4 million members, collectively managing US\$426 million in capital.⁴⁶ SACCOs specialize in short-term agricultural loans, essential for SHCFs needing financial solutions between one harvest and the next.

Overall, the existing MFI network offers potential to bridge the financial gap for SHCFs. However, declining repayment rates and liquidity constraints

have strained this sector. Collaborations between MFIs and cooperatives could provide a more comprehensive approach to rural finance, enhancing economic resilience and growth, while also tailoring the loans to the needs of farmers.

Ethiopia's cooperative sector, reinvigorated by market liberalization and government support, has grown significantly in recent decades. In 2021, there were over 93,000 multipurpose primary cooperatives in the country, serving over 21 million members.⁴⁷ Cooperatives like Oromia Coffee Farmers' Cooperative Union (OCFCU) and Sidama Coffee Farmers' Cooperative Union (SCFCU) have improved asset ownership and market access for SHCFs. Cooperatives also take part in the MFI sector, already performing lending activities and supporting SHCFs through collective bargaining and market integration.⁴⁸

Despite their growth, cooperatives face challenges, including limited financial services, inadequate infrastructure, and weak organizational capacity. Rapid expansion has strained primary cooperatives, which often lack financial resources and support structures. Commercial banks hesitate to lend to cooperatives due to perceived risks, favoring private traders and exporters instead.⁴⁹

Studies show that cooperative membership enhances market access, bargaining power, and income for SHCFs, although benefits vary based on education, farm size, and tenure.^{50 51} These institutions, alongside MFIs, are critical to loan-based mechanisms towards R&R, leveraging established infrastructure and community reach to support Ethiopia's coffee sector. However, addressing existing gaps in education, finance, and infrastructure remains essential for maximizing their impact.^{52 53}

3.4 Towards enabling access to finance for SHCFs and R&R in Ethiopia

Financial cooperatives and microfinance institutions are the two major sources of rural finance in Ethiopia. Comprehensive national-level data on smallholder farmers' access to credit in Ethiopia is limited. However, different sampling studies found that a third of smallholder farmers had access to credit (36.5% in part of the South Ethiopian Region).^{54 55} The Ethiopian National Financial Inclusion Strategy (2014-2020)⁵⁶ and II (2021-25)⁵⁷ recognized that access to credit in agriculture remains limited. Consequently, the last iteration of the strategy developed programs to drive financial inclusion for underserved areas and expand access to credit.

Access to finance is a critical obstacle for Ethiopian SHCFs. This challenge is reflective of broader agricultural financing issues, stemming from the remote location of farms, unpredictable yields and prices, and volatile cash flows that financial institutions perceive as high-risk. Strict collateral requirements and limited agricultural financing expertise within Ethiopia's financial sector exacerbate these challenges.⁵⁸

Currently available financial products do not meet the unique requirements of SHCFs for R&R. Standardized loan structures are mismatched to the needs of SHCFs (including term, amounts, grace periods, and reasonable interest rates). Existing schemes disproportionately benefit wealthier farmers, applying the same legislative requirements to large-scale and small-scale farmers alike, leaving many SHCFs unable to meet collateral demands.

Banks have the capacity to provide more tailored financial products but currently focus on short-term agricultural loans, typically tied to a single harvest cycle and covers less than one year. Loans extending to five years or more, which are necessary for R&R investments, are rare. This gap underscores the need for restructured financial products designed to support the long-term goals of SHCFs.

Table 2 provides examples of financing modalities based on existing or past R&R programs, both within Ethiopia and in other major coffee producers. These fall in two main categories: loan-based programs and grant-based programs.

Table 2. Some of Coffee R&R financing modalities

Solution	Pros	Cons	Examples
Loan-Based Financing	Market-driven financing, lower-risk investments are made first, scalability	Possible exclusion of poorest farmers, unattractive terms for SHCFs and intermediaries, financial challenges in repayment.	- Colombia – FINAGRO, Fondo Nacional del Café and the Colombian Government – Permanency Sustainability and Future (PSF) program (2008-2014, US\$ 600 million) - Honduras, Nicaragua, Peru, Mexico (Root Capital, USAID, Keurig, Starbucks) – Coffee Farmer Resilience Initiative (2014-2016, US\$ 17.5 million)
Grant-Based Financing	Maximizes accessibility, no repayment obligation, strategic long-term investment	High dependency of poorest, lack of financial discipline, limited scalability, may have limited effect on capacity building	- Ethiopia -- TechnoServe's stumping programme within the World Bank's BioCarbon Fund Initiative for Sustainable Forest Landscapes (ISFL)- Oromia Forested Landscape Program (OFLP) – (2020-2025, US\$ 25 million) - Mexico, El Salvador, Guatemala – Starbucks, ECOM and Conservation International - One Tree for Every Bag Commitment Program (1T1B) – (2015-2017, US\$ 19.5 million)

Source: Authors' own elaboration based on USAID⁵⁹ as well as program-specific reports

Ethiopia is undertaking significant reforms to attract private-sector investment and liberalize its financial markets. For example, the National Bank of Ethiopia (NBE) has issued a directive which allows foreign direct investment (FDI) projects to operate offshore accounts and guarantees foreign currency convertibility. This directive primarily targets infrastructure but has

potential applications in coffee-sector investments. Similarly, the recent legislation to allow foreign banks to operate in Ethiopia will increase competition and improve access to finance, opening avenues for tailored lending products to SHCFs.⁶⁰

3.5 Existing initiatives and emerging opportunities for transforming Ethiopia's coffee sector

While Ethiopia has explored initiatives to enhance coffee farm yields (see Table 2), no program to date has comprehensively addressed R&R through a scalable loan-based mechanism. The Ethiopian Coffee and Tea Authority (ECTA) oversees a stumping program, though its reach is limited. Other initiatives include the Oromia Forested Landscape Program (OFLP), financed by the World Bank's BioCarbon Fund, and the European Union's EU-Coffee Action for Ethiopia (EU-CAFE), which have improved awareness and provided tools and resources for smallholders. However, despite having achieved localized successes, these efforts have yet to make a substantial impact on reducing the age of coffee trees or improving productivity.

Beyond the coffee sector, other financing programs indirectly support SHCFs. The Rural Financial Intermediation Programme (RUFIP) III, led by the Development Bank of Ethiopia and supported by The International Fund for Agricultural Development (IFAD), provides financial services to rural communities through MFIs and rural savings and credit cooperatives (RUSACCOs). Additionally, the Input Voucher Sales System (IVS) offers loans or vouchers to farmers for essential inputs, reducing upfront costs. USAID's CATALYZE Market Systems for Growth (MS4G) program facilitated – amongst its broader support to small and medium-sized enterprises, in Ethiopia's coffee sector and beyond – access to nutrients via a blended finance approach.

Blended finance has recently been emerging as a promising tool for bridging social and economic goals. Ethiopia's Ministry of Finance, in collaboration with Convergence, is working on a regulatory framework to attract investment through blended finance facilities.

Furthermore, Ethiopia has prior experience in innovative funding mechanisms, such as the Climate-Resilient Green Economy facility (CRGE), established in 2013 to mobilize international financial support for a carbon-neutral agenda. The facility uses climate-finance mechanisms to complement existing investments in the areas of food security, energy, infrastructure development and natural resources management. While the CRGE encountered operational challenges, it demonstrated the feasibility of attracting diverse funding sources for national initiatives.^{61 62}

A transformative path forward for R&R lies in leveraging blended finance, fostering partnerships between public and private sectors, and incorporating lessons from successful small-scale programs.



4

Conclusion



Ethiopia's coffee sector is at a pivotal crossroads, offering immense potential to enhance productivity, livelihoods, and environmental sustainability while confronting significant challenges. With its historical and cultural roots in coffee production, Ethiopia holds a critical position in the global coffee market. However, the sector's low productivity, reliance on traditional farming practices, and vulnerability to climate change and market volatility hinder its growth.

R&R presents a transformative opportunity to address these challenges, revitalizing aged coffee farms, increasing yields, and improving the resilience of coffee production – hedging against agricultural risks such as disease, climate change effects as well as market risks such as price volatility and market shocks. The analysis underscores the critical role of financing mechanisms tailored to SHCFs such as blended finance, long-term loans, and solutions which are both market-driven and rely on existing networks of stakeholders. These measures, combined with technical assistance and policy reforms, can bridge the gap between productivity potential and current realities.

Strategic investments in R&R, complemented by comprehensive support systems, could double yields and unlock substantial economic benefits, directly impacting millions of smallholder farmers and their livelihoods. This approach aligns with broader goals of sustainable development, environmental conservation, and economic transformation. While obstacles persist, Ethiopia committing to innovation, partnerships, and inclusive financing mechanisms can propel its coffee sector into a new era of prosperity and sustainability.

The journey ahead requires a coordinated effort across government, private sector, and international stakeholders. By fostering collaboration and implementing both targeted and comprehensive interventions, Ethiopia can cement its status as a global leader in coffee production while improving the well-being of its communities and ecosystems.

5

Recommendations



The process of R&R is essential to restoring productivity, increasing the income of SHCFs, improving the resilience of coffee farms, and ultimately maintaining Ethiopia's status as a global coffee leader. However, implementing R&R poses a challenge, particularly for smallholder farmers who typically lack the technical and financial means to perform it on their farms.

1



Structure a dedicated financing mechanism to provide SHCFs with access to finance that meet the needs of R&R

To address this challenge, a dedicated financing mechanism is required, one that meets the unique needs of farmers and enables the comprehensive implementation of R&R, while also being market-based to ensure the long-term sustainability and scalability of the financing. First and foremost, financing must provide long-term loans with repayment structures that align with the lifecycle of coffee trees. They should cover not only the labor, tools and input costs, but also the income losses, recognizing that new plantings or rejuvenated trees will not yield productive harvests for at least two to three years. Additionally, these loans should be accessible to smallholder farmers in remote areas, many of whom lack the collateral or financial infrastructure to secure traditional bank loans.

2



Upskill farmers and other coffee value chain stakeholders on R&R techniques

Beyond financing, there is a need to complement financial solutions with capacity-building initiatives. Farmers require technical assistance, including training on GAP and R&R techniques, to maximize the effectiveness of investments in new coffee stock. Partnerships with various stakeholders across the coffee value chain—such as tree nurseries, cooperatives, and business support services—are crucial for ensuring farmers have access to the necessary inputs and market opportunities.

3



Establish a fund to manage financial flows and support activities

Given these requirements, Ethiopia should consider establishing a financing platform dedicated to the renovation of coffee trees at the national level. This new fund would serve as a centralized platform for mobilizing public and private resources, combining loans with favorable terms for smallholder farmers, as well as incentives for the different stakeholders of the coffee value chain, ensuring the broader support necessary for successful R&R implementation. Such fund could also serve as a tool to enhance collaboration across the coffee value chain, helping to ensure that financing, technical assistance, and market access work in tandem to support the long-term sustainability and growth of Ethiopia's coffee industry.

6

References

- 1 **Morka and Wamatu (2020).** Morka, Esayas Mulatu, and Jane Wamatu. "Ethiopian Microfinance Assessment Report: A Case for Entrepreneurship Skills Development for Youth in Sheep Fattening." ICARDA, 2020. <https://hdl.handle.net/20.500.11766/10765>.
- 2 **USDA (2023).** United States Department of Agriculture. "Coffee Annual Report: Ethiopia." 2023. <https://fas.usda.gov/data/ethiopia-coffee-annual-8>.
- 3 **Abate et al. (2021).** Abate, Gashaw Tadesse, et al. "Improving Coffee Productivity in Ethiopia: The Impact of a Coffee Tree Rejuvenation Training Program on Stumping." *SSRN Electronic Journal*, 2021. DOI.org (Crossref), <https://doi.org/10.2139/ssrn.3850381>.
- 4 **(FAOSTAT (2023).** Food and Agriculture Organization of the United Nations (FAO). "Statistical YearBook, World Food and Agriculture" 2023 <https://openknowledge.fao.org/items/5c272dc7-e1b8-486a-b323-6babb174eee0>
- 5 *ibid*
- 6 **Abate et al. (2021) op.cit**
- 7 **Assefa et al. (2021).** Assefa, T., Tadesse, G., & Abebe, E. "Trend, Instability and Decomposition Analysis of Coffee Production in Ethiopia (1993–2019)." *Heliyon*, vol. 7, 2021, e08022. <https://doi.org/10.1016/j.heliyon.2021.e08022>.
- 8 **USAID (2017a).** United States Agency for International Development. "Country Data Sheets for Coffee Renovation and Rehabilitation." 2017. https://www.idhsustainabletrade.com/uploaded/2019/08/CountryProfile_Climate_Coffee_ALL.pdf.
- 9 **Sachs et al. (2019).** Sachs, Jeffrey D., et al. «Ensuring Economic Viability and Sustainability of Coffee Production.» *Columbia Center on Sustainable Investment*, 2019. https://scholarship.law.columbia.edu/sustainable_investment_staffpubs/53.
- 10 **Assefa et al. (2021). Op.cit**
- 11 **Minten et al. (2019).** Minten, Bart, Mekdim Dereje, Ermias Engida, and Tadesse Kuma. "Coffee Value Chains on the Move: Evidence in Ethiopia." *Food Policy*, vol. 83, 2019, pp. 370–383. <https://doi.org/10.1016/j.foodpol.2017.05.007>.
- 12 **GAIN (2019).** Global Agricultural Information Network. "Ethiopia Coffee Annual Coffee Exports Continue at Record Levels." GAIN Report Number: ET1820, Addis Ababa, Ethiopia, 2019. https://apps.fas.usda.gov/newgainapi/api/report/downloadreportbyfilename?filename=Coffee%20Annual_Addis%20Ababa_Ethiopia_5-24-2018.pdf.
- 13 **World Bank (2021).** "Ethiopian Farmers Triple Coffee Yields with Sustainable Tree Stumping." *World Bank*, 2021. <https://www.worldbank.org/en/news/feature/2021/04/20/ethiopian-farmers-triple-coffee-yields-with-sustainable-tree-stumping>.
- 14 **Assefa et al. (2021). Op.Cit.**
- 15 **USAID (2017a). op.cit**
- 16 **Abdeta et al. (2024).** Abdeta, D., Begna, R., Zerfu, H. et al. Analyzing the extent and drivers of land use/land cover change in Southwestern Ethiopia. *Discov Sustain* 5, 505 (2024). <https://doi.org/10.1007/s43621-024-00734-0>.
- 17 **Frapaise (2022).** Frapaise, L. "Why Have Ethiopian Coffee Farmers Earned Lower Incomes Between 1990 and 2019 Despite Increasing Coffee Production, and What Solutions Are There to Improve Their Incomes?" *SSRN Electronic Journal*, 2022. <https://ssrn.com/abstract=4049089>.
- 18 **Bote (2011).** Bote, A. and Struik, P. "Effects of shade on growth, production and quality of coffee (*Coffea arabica*) in Ethiopia." *Journal of Horticulture and Forestry* Vol. 3(11), pp. 336–341, 27 October, 2011. <https://edepot.wur.nl/192807>.

- 19 **Frapaise (2022). Op.cit**
- 20 **USAID (2017b).** United States Agency for International Development. "Renovation & Rehabilitation for Resilient Coffee Farms: A Guidebook for Roasters, Traders, and Supply Chain Partners." 2017. https://pdf.usaid.gov/pdf_docs/PA00TK8B.pdf.
- 21 *ibid*
- 22 **USAID (2017a). op.cit**
- 23 *ibid*
- 24 **USAID (2017a). op.cit**
- 25 *ibid*
- 26 **Root Capital (2016).** "Financing Farm Renovation: How to Build Resilience Using a Blend of Capital." <https://rootcapital.org/wp-content/uploads/2024/06/Root-Capital-CFRI-Learning-Report-Full-Report.pdf>
- 27 **USAID (2017b). op.cit.**
- 28 **Rabobank (2015).** Rabo International Advisory Services and the sustainable trade initiative. "Rehabilitation and Renovation of crop trees in cocoa, coffee and palm oil." <https://www.idhsustainabletrade.com/uploaded/2017/03/RIAS-RR-Report.pdf>
- 29 Oromia Forested Landscape Program-Emission Reduction Project (OFLP-ERP). <https://oflp.et/>
- 30 **Dalberg (2015).** Dalberg Global Development Advisors and the sustainable trade initiative. "Smallholder tree crop renovation and rehabilitation (R&R): A Review of the State of the Emerging R&R Market and Opportunities to Scale Investment." November 2015. <https://www.idhsustainabletrade.com/uploaded/2017/03/Dalberg-RR-Report.pdf>
- 31 **Hausmann, R. et al. (2022).** Hausmann, R., O'Brien, T., Cheston, T., Hassen, I.W., Soylu, C., Shah, K., Taniparti, N., Prasad, P., and Neumeyer, P.A., "Development in a Complex World: The Case of Ethiopia." CID Faculty Working Paper Series 2022.423, Harvard University, Cambridge, MA, November. 2022. <http://www.tinyurl.com/29hh9yf6>.
- 32 *ibid*
- 33 **K-Flip (2023).** "Ethiopia's Banking Sector Grapples with Historic Liquidity Crisis." *K-Flip*, 2023. <https://kflip.info/2023/04/11/ethiopias-banking-sector-grapples-with-historic-liquidity-crisis/>.
- 34 **Zum Coffee (2023).** "11/9/23 Update - Birr/kg Prices for 2024 Harvest." *Zum Coffee*, 2023. <https://www.zum.coffee/updates-from-the-field/11-9-23-birr-pricing>
- 35 **USDA (2023). Op.cit**
- 36 **Singh (2022).** Singh, S. N. "Coffee Value Chain in Ethiopia: A Case Study." *Financial Markets, Institutions and Risks*, vol. 6, no. 4, 2022, pp. 76–100. [http://doi.org/10.21272/fmir.6\(4\).76-100.2022](http://doi.org/10.21272/fmir.6(4).76-100.2022).
- 37 *ibid*
- 38 **Minten et al. (2019). Op.cit**
- 39 **Mas Aparisi (2021).** Mas Aparisi, A. "Ethiopian Coffee Marketing Reforms and Smallholder Coffee Producers: A Socio-Legal Empowerment Lens." IIED, London, 2021. <https://www.iied.org/2011iied>.
- 40 **Frapaise (2022). Op.cit**
- 41 **Hütz-Adams, F. (2020).** Hütz-Adams, F., Morazán, P., Wulf, P., "Impact of supply chain relations on farmers income in Ethiopia." *Institut für Ökonomie und Ökumene*. <https://www.suedwind-institut.de/fileadmin/Suedwind/Publikationen/2020/2020-10%20Impact%20of%20supply%20chain%20relations%20on%20farmers%20income%20in%20Ethiopia.pdf>
- 42 **Frapaise (2022). Op.cit**

- 43 Mas Aparisi (2021). Op.cit
- 44 USAID (2017b). op.cit.
- 45 NBE (2024). National Bank of Ethiopia. "Financial Stability Report." https://nbe.gov.et/wp-content/uploads/2024/04/Finacial_Stability_Report_NBE_WF.pdf.
- 46 FCA (2021). Federal Cooperative Agency. "Official report." <http://www.fca.gov.et/>.
- 47 Coop (2021). International Co-operative Alliance. "National Report: Ethiopia." ICA-Africa. <https://coops4dev.coop/sites/default/files/2021-06/Ethiopia%20Key%20Figures%20Report.pdf>.
- 48 Mas Aparisi (2021). Op.cit
- 49 Gurmessa et al. (2022). Gurmessa, E., Ndinda, C., Agwanda, C., & Akiri, M. „Partial Credit Guarantee and Financial Additionality for Smallholder Coffee Cooperatives: Experience from Ethiopia." *Development in Practice*, vol. 32, no. 8, 2022, pp. 1049-1062. <https://doi.org/10.1080/09614524.2021.1958161>.
- 50 Ahmed and Mesfin (2017). Ahmed, Musa Hasen, and Hiwot Mekonnen Mesfin. "The Impact of Agricultural Cooperatives Membership on the Wellbeing of Smallholder Farmers: Empirical Evidence from Eastern Ethiopia." *Agricultural and Food Economics*, vol. 5, no. 1, Dec. 2017, p. 6. DOI.org (Crossref), <https://doi.org/10.1186/s40100-017-0075-z>.
- 51 Shumeta and D'Haese (2016). Shumeta, Z., and M. D'Haese. "Do Coffee Cooperatives Benefit Farmers? An Exploration of Heterogeneous Impact of Coffee Cooperative Membership in Southwest Ethiopia." *International Food and Agribusiness Management Review*, vol. 19, no. 4, 2016, pp. 37–52. <https://doi.org/10.22434/IFAMR2015.0153>.
- 52 Ahmed and Mesfin (2017).op.cit
- 53 Gurmessa et al. (2022).op.cit
- 54 Waje (2020). Waje, S. S. "Determinants of Access to Formal Credit in Rural Areas of Ethiopia: Case Study of Smallholder Households in Boloso Bombbe District, Wolaita Zone, Ethiopia." *Economics*, vol. 9, no. 2, 2020, pp. 40–48. <https://doi.org/10.11648/j.eco.20200902.13>.
- 55 Lemessa & Gemechu (2016). Lemessa, A., & Gemechu, A. "Analysis of Factors Affecting Smallholder Farmers' Access to Formal Credit in Jibat District, West Shoa Zone, Ethiopia." *International Journal of African and Asian Studies*, vol. 25, 2016. <https://repository.ju.edu.et/handle/123456789/3040>.
- 56 NBE (2017). "The National Financial Inclusion Strategy". <https://fsdethiopia.org/wp-content/pdf/ethiopian-national-financial-inclusion-strategy.pdf>
- 57 NBE (2021). "The National-Financial-Inclusion-Stratgy-II-2021-2025". <https://nbe.gov.et/wp-content/uploads/2023/12/National-Financial-Inclusion-Stratgy-II-2021-2025.pdf>
- 58 GIZ (2021). Christopher Engelhardt, Oliver Schmidt. "Barriers to Agricultural Finance in Ethiopia." Deutsche Gesellschaft für Internationale Zusammenarbeit, 2021. <http://dx.doi.org/10.13140/RG.2.2.28771.43040>.
- 59 USAID (2017b). op.cit.
- 60 The Banker (2023). "Ethiopia Finalises Banking Liberalisation Rules as Foreign Currency Challenges Mount." *The Banker*, 2023. <https://www.thebanker.com/Ethiopia-finalises-banking-liberalisation-rules-as-foreign-currency-challenges-mount-1701086206>.
- 61 World Resources Institute (2022). Belay, Abiyot & Elliott, Cynthia & Corfee-Morlot, Jan & Tsehay, Solomon. (2022). "Mainstreaming Climate Change in Ethiopia's Planning Process." *World Resources Institute*. <http://dx.doi.org/10.46830/wriwp.21.00032>.
- 62 Bhandary (2022). Bhandary, R. "Climate Mainstreaming via National Climate Funds: The Experiences of Bangladesh and Ethiopia." *Climate and Development*, vol. 14, no. 4, 2022, pp. 311-320. <https://doi.org/10.1080/17565529.2021.1921686>.



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