

Final Report: The Effect of Fairtrade on Forest Protection and Deforestation Prevention

Analysis of the Effects of Fairtrade's Pricing and Premium Regulations and other Interventions on Forest Protection and Deforestation Prevention at the Producer Level

Submitted on May 30th, 2024, by:







Table of Contents

ABBREVIATIONS	4
INTRODUCTION	5
Background	5
OBJECTIVES	
METHODOLOGY	9
Phase One: Desk Review	9
Phase Two: System-level Stakeholder Interviews	9
Phase Three: Field Work	10
Phase Four: Buyer Interviews	11
PHASE ONE: DESK REVIEW	11
Tree Cover Loss and Deforestation Data in the Target Regions	11
Key Drivers of Deforestation	15
Market Factors: Trade and Low Prices (Contributing to Negative Economic 'Dispositions')	15
Institutional Factors: Governmental and Corporate Policies and Resources	16
Biophysical Dispositions: Climate Change	
Cultural Dispositions: Educational Factors and Farmer Knowledge	
INTERVENTIONS PROVEN EFFECTIVE IN CURBING DEFORESTATION	
Voluntary Sustainability Standards (VSS)	
Regulatory Approaches	
Landscape and Jurisdictional Approaches	
Corporate Pledges and Programmes	
Public-Private Partnerships (PPPs)	
Due Diligence Mechanisms	
Summary	30
PHASE TWO: SYSTEM-LEVEL STAKEHOLDER INTERVIEWS	30
Кеу Тнемеѕ	30
1. System-level Awareness of Deforestation Hotspots and Definitions	
2. System-level Awareness of Drivers and Inhibitors of Deforestation	
3. Fairtrade's Impact on Deforestation and Related Challenges	
4. Claiming Correlation vs. Causation	34
5. Need for More Resources and Support to SPOs	34
6. Setting and Achieving Targets Alongside External Stakeholders	
7. The Role of Fairtrade Going Forward	37
ESTABLISHMENT OF PROGRAM THEORY	
PHASE THREE: FIELD WORK	41
Qualitative Research Findings	44
1. Ongoing Challenges in Farming Communities and the Link to Deforestation	45
2. Perception of Deforestation Risks, Rates, and Inhibitors	46
3. Awareness of and Concerns about EUDR Among SPO Leaders and Members	
4. Digital Capacity, Progress, and Challenges	
5. The Role of the Fairtrade's Pricing and Premium Regulations in Forest Conservation	
6. Standards and Training on Standards Perceived as Relevant	
7. Relevance of PN Support in Environmental Conservation	

8. The Relevance of Non-Fairtrade Partnerships	52
Quantitative Research Findings	
Coherence with Qualitative Results	
Additional (non-statistical) Evidence on the Perceived Advantages and Disadvantages of	
Conservation and Agroforestry	58
Evidence of Best Practice Among Cocoa and Coffee Producers	
PHASE FOUR: BUYER INTERVIEWS	63
CONCLUSIONS AND RECOMMENDATIONS	64
THE IMPACT OF FAIRTRADE	64
CLOSING REMARKS	72
REFERENCES	75
ANINEY 4. METHODOLOGICAL TARLE	70
ANNEX 1: METHODOLOGICAL TABLE	79

Abbreviations

AHPROCAFE - Asociación Hondureña de Productores de Café

ANADER - L'Agence Nationale d'Appui au Développement Rural

ASASE - Accessible Soils and Sustainable Environments

COMISUYL - Cooperativa Mixta Subirana Yoro Limitada

COMSA - Café Orgánico Marcala, S.A.

COOBADI - Coopérative Bassadougou de Dies

CFI - Cocoa & Forests Initiative

CLAC - Latin American and Caribbean Network of Fairtrade Small Producers and Workers

ECACOM - Société Coopérative avec Conseil d'Administration des Éco-Agriculteurs Modernes de Meagui

EU - European Union

EUDR - European Union Deforestation Regulation

FAO - Food and Agriculture Organisation of the United Nations

FMP - Fairtrade Minimum Price

FNC - Federación Nacional de Cafeteros

FTA - Fairtrade Africa

FTP - Fairtrade Premium

GAP - Good Agricultural Practice

GPS - Global Positioning System

HA - Hectares

HREDD - Human Rights and Environmental Due Diligence

HLO - Hired Labour Organisation

IDH - The Sustainable Trade Initiative

IHCAFE - Instituto Hondureño del Café

KPI - Key Performance Indicator

LIRP - Living Income Reference Price

LQAS - Lot Quality Assurance Sampling

MT - Metric Tonne

MZ - Manzana

NAPP - Fairtrade Network of Asia & Pacific Producers

NFO - National Fairtrade Organisation

O2B - (Fairtrade) "Offer-to-Business" Projects

ofi - Olam Food Ingredients

P4F - Partnerships for Forests

PEDR - Propositions, Encounters, Dispositions, Responses

PES - Payment for Ecosystem Services

PN - Producer Network

PPP - Public Private Partnerships

RA - Rainforest Alliance

REDD+ - Reducing Emissions from Deforestation and Forest Degradation

SPO - Small Producer Organisation

ToC - Theory of Change

UK - United Kingdom

VSS - Voluntary Sustainability Standards

WACP - West Africa Cocoa Programme

Introduction

Background

Fairtrade International is a non-profit, multi-stakeholder association made up of 22 member organisations, including three Producer Networks (PNs) and 19 National Fairtrade Organisations (NFOs). Fairtrade International coordinates activities for these stakeholders and owns the Fairtrade registered trademark, which ensures that all small producer organisations (SPOs), Hired Labour Organisations (HLOs), and consumer businesses involved with the buying and selling of a Fairtrade product have met certain international standards. These standards are product-specific and based on key environmental, social, and economic sustainability principles.

Standards are only one way that Fairtrade promotes environmental action and socioeconomic sustainability for producers and workers. The association also focuses on human rights and climate justice in trade through pricing and premium regulations, project-based interventions, and more. While Fairtrade has been driving and supporting action on climate and the environment for years, it is typically recognised as primarily a socioeconomic certification. The current strategy on climate change and the environment (2022-2025) recognises the need to better highlight system-wide interventions related to climate change, including those that curb deforestation. This is especially critical as the Fairtrade system must continue to maintain relevance and market access for stakeholders amidst changes in climate-focused global trade legislation.

In 2023, the European Union (EU) introduced new legislation aimed at minimising the risk of placing products and commodities causing deforestation and forest degradation on the EU market.¹ The regulation's main proposals refer to the introduction of a benchmarking system, requirements of geolocation and traceability for each plot of land used in the production of relevant commodities, and the setting of a cut-off date for the implementation of mandatory due diligence rules. The European Commission plans to be in charge of creating the benchmarking system, and of determining whether countries pose a low, standard, or high risk of generating commodities or products that do not comply with the legislation. Depending on the identified risk level in the country or region of production, different obligations will apply. Products originating from low-risk areas, for example, will have simpler due diligence requirements, while those from high-risk areas² will undergo more rigorous scrutiny.³

In addition to cattle, palm oil, rubber, soy, and timber, cocoa and coffee are two of the products included in the legislation, which is known as the European Union Deforestation Regulation (EUDR). As the Fairtrade system supplies cocoa and coffee to the EU market,⁴ the

¹ It is estimated that 7.5% of the EU's share of global deforestation is linked to cocoa imports and 7% to coffee imports (Pendrill, et al., 2020). For more information about the EUDR, see https://data.consilium.europa.eu/doc/document/ST-16298-2022-INIT/en/pdf

² The criteria under which high-risk countries or areas will be classified in the EUDR is, as of April 2024, still pending. As of June 2023, all countries have been assigned a default "standard risk."

³ https://ec.europa.eu/commission/presscorner/detail/en/qanda_21_5919

⁴ Top markets for Fairtrade cocoa in 2021 included three EU countries – Germany, the Netherlands, and France – while top markets for Fairtrade coffee in the same year included Germany and France; information sourced from https://files.fairtrade.net/publications/Fairtrade-International-Annual-Report-2021-2022.pdf

association has already updated or is in the process of updating their standards for these products to ensure they comply with the EUDR. Not only does this support ongoing market access for Fairtrade actors, but it also aligns with system-wide promotion of sustainable trade. Specifically, the new core requirements for SPOs include the implementation of environmental risk assessments and the collection of geolocation data to ensure no deforestation has occurred after a certain cut-off date. Ongoing reporting is also a key part of the new core requirements, as is shared responsibility among system stakeholders. These compliance-specific core requirements align with Fairtrade's other core and development requirements⁵ promoting increased adoption of sustainable production. For example, in the cocoa standard, SPOs collect information at the farm level to support practice change and sustainable farm improvements. This core requirement sits alongside the development requirement to review and update farm improvement plans, which focus on agroforestry promotion, among others.

In addition to standards updates, Fairtrade supports EUDR compliance and environmental action via programmatic interventions. In regard to compliance, after having tested satellite-based deforestation monitoring through pilot projects, Fairtrade, in partnership with Satelligence⁶, has now established an operational satellite-based deforestation monitoring system covering all Fairtrade-certified cocoa and coffee SPOs, which supports them to comply with the EUDR. In promoting environmental action, Fairtrade simultaneously works through PNs to support smallholder farmers as they adapt to and mitigate climate change. Additionally, PNs empower transitions to or maintenance of agroforestry systems at the farm level, which ensures that smallholders are able to protect forests and maintain biodiversity while also ensuring their livelihoods. Meanwhile, Fairtrade's pricing and premium regulations serve to address livelihood development, without which environmental protection would not be possible at the producer level.

Objectives

In light of the EUDR and Fairtrade's efforts to both support system-wide compliance and demonstrate the association's ongoing climate-related actions, the objective of this report is to summarise findings from an investigation into the extent to which, and if and how, Fairtrade incentivises or de-incentivises deforestation in the cocoa and coffee sectors through its standards and tools. The study, conducted between May 2023 and April 2024, focused on an analysis of Fairtrade's pricing and premium regulations as well its engagement on the ground with SPOs and farmers. Colombia, Côte d'Ivoire, Ghana, Honduras, and Peru were identified as the countries in-scope for the assignment, given that Colombia, Honduras, and Peru produced the largest volumes of coffee sold on Fairtrade terms in 2021 – 36,100 metric tonnes (MT), 43,952 MT, and 51,398 MT, respectively⁷ – while in 2020, Ivory Coast and Ghana produced the largest volumes of cocoa sold on Fairtrade terms in Africa and the Middle East, 119,068 MT and

⁵ Fairtrade standards include core requirements that must be met by SPOs and buyers to obtain and maintain certification, and development requirements are those that can be adopted over time to increase sustainability.

⁶ Home - Satelligence - Sustainability monitoring simplified

⁷ https://files.fairtrade.net/publications/Fairtrade-Regional-Monitoring-report-Latin-America-and-the-Caribbean-2023.pdf

7,775 MT, respectively (see Figures 1 and 2 below).⁸ In formalising the study in these regions, the following goals were highlighted by the Fairtrade system:

- 1. To make recommendations on how Fairtrade can facilitate the development of effective ways to protect forests in the context of small-scale cocoa and coffee production.
- 2. To identify where and under which conditions Fairtrade pricing regulations have an influence on the deforestation practices of smallholder farmers, especially within the cocoa and coffee sectors.
- 3. To compare the potential impact on deforestation of Fairtrade pricing tools with the impact of price fluctuations on the commodities markets for cocoa and coffee.
- 4. To look for and analyse various types of data related to deforestation in the context of smallholder cocoa and coffee production in general.
- 5. To look for and analyse various types of data related to deforestation in the context of Fairtrade cocoa and coffee production, including:
 - a. potentially available data from ongoing deforestation monitoring projects that Fairtrade is currently running.
 - b. data available in the Fairtrade system demonstrating Fairtrade Premium (FTP) investments into forestry, afforestation, re-afforestation, and/or agroforestry projects.
- 6. To assess whether there is a possible correlation between deforestation and the FTP or the payment of the minimum price and/or organic differential (if applicable).
- 7. To assess the impact of standard criteria that prohibits deforestation and/or obliges forest (and biodiversity) protection.
- 8. To assess the impact of producer programs, capacity building, and projects on the implementation of measures to protect forests (and biodiversity), and on the establishment of agroforestry in cocoa and coffee production.
- 9. To assess any other influence of Fairtrade on farmer practices as related to forest protection or usage.

⁸ https://files.fairtrade.net/publications/2022-Fairtrade-regional-monitoring-Africa-and-Middle-East-13th-ed.pdf

Figure 1. Volumes of coffee sold on Fairtrade terms in 2021, Latin America and the Caribbean

Volumes of coffee sold on Fairtrade terms in 2021 from Latin America and the Caribbean

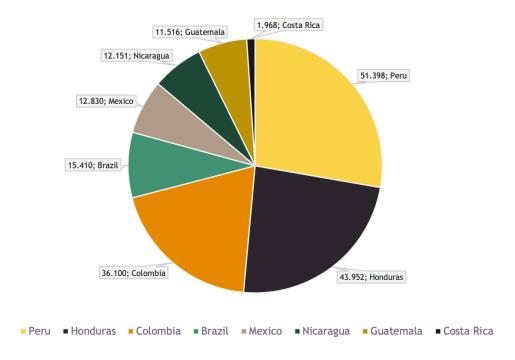
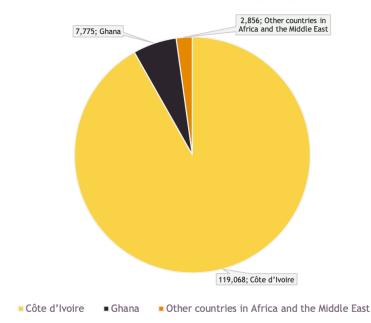


Figure 2. Volumes of cocoa sold on Fairtrade terms in 2020, Africa and the Middle East

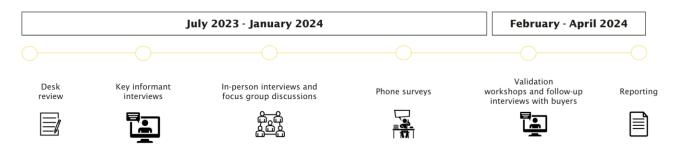
Volumes of cocoa sold on Fairtrade terms in 2020 from Africa and the Middle East



Methodology

In order to analyse the impact of the Fairtrade system on forest protection and deforestation prevention in the cocoa and coffee sectors, a four-phased approach was employed (Figure 3). A summary of these phases is provided below, while a more detailed description of the study's driving methodologies, sampling frameworks, and limitations can be found in Annex 1.

Figure 3. Visual representation of the stages of data collection



Phase One: Desk Review

The desk review consisted of an analysis of documents both internal and external to Fairtrade and was aimed at understanding i) deforestation data for the countries in scope, ii) the drivers and inhibitors of deforestation in the target regions, and iii) the overall success of deforestation-related interventions in the cocoa and coffee sectors overall.9 In total, more than 60 documents were reviewed, including scientific peer-reviewed articles, reports, monitoring studies from private actors and multi-stakeholder initiatives, case studies, and more. A socialembeddedness lens was applied during document review, and information was analysed via a technological change framework. Embeddedness is a concept founded by Karl Polanyi, who posited that economic activity interacts with non-economic institutions. Specifically, the factors that drive or curb deforestation or promote forest protection are not only economic in nature, but also social, cultural, and political, and these factors impact the success of deforestationrelated interventions. Meanwhile, the technological change framework of Glover et al. (2019) analyses interventions as technologies. It considers how four aspects - Propositions, Encounters, Dispositions and Responses (PEDR) – interact with change processes and affect outcomes. In other words, an actor's expectations of an intervention (propositions), their experiences of it (encounters), and their perceptions of it (dispositions) will affect how they engage (responses).

Phase Two: System-level Stakeholder Interviews

Between September and October 2023, a total of 15 one- to two-hour online interviews were conducted with a number of Fairtrade stakeholders, including members of the Global

⁹ Of note, while the study went beyond drivers and inhibitors of deforestation to also understand motivations for agricultural best practice and forest protection, the desk review primarily focused on understanding deforestation-related data.

Impact, Advocacy, and Standards and Pricing teams; representatives of PNs, NFOs, and Centres of Excellence; and the Senior Advisor for Climate & Environment, the Global Cocoa Product Manager, and the Senior Manager for Coffee. The overarching goal of this interview process was to assess stakeholders' perspectives on how the Fairtrade system and its Theory of Change (ToC) contributes to incentivising or de-incentivising deforestation prevention and forest protection. Interviewees were asked to comment on whether and to what extent the drivers and inhibitors of deforestation present in the literature were reflected among cocoa and coffee producers from Fairtrade SPOs, and whether and to what extent the interventions from the literature were leveraged, successfully or unsuccessfully, in the Fairtrade system.

An Outcomes Harvesting approach was employed as the guiding methodological framework for this phase of work. Such an approach tends to be used when interventions are multiple, complex, or not fully understood by participants, and when predetermined objectives have not yet been established. While interviewees had clarity on the Fairtrade system and its interventions, they had not fully explored the system's impact on deforestation prevention and forest protection in particular. In this context, the Outcomes Harvesting approach allowed us to i) understand stakeholders' views on a multitude of factors, and how these factors may or may not contribute to certain behaviours and achievements; and ii) collect evidence of what has changed in relation to deforestation or forest protection as a result of Fairtrade interventions. We considered Fairtrade as both a blanket intervention as well as an organiser of several interventions.

Based on the interview results and the evidence suggested by stakeholders, a Program Theory was developed describing how Fairtrade's interventions interact with deforestation prevention and forest protection. Additionally, hypotheses about how system-wide interventions limit deforestation among certified cocoa and coffee producers were established, in preparation for the next phase of work.

Phase Three: Field Work

To test the relevance of the Program Theory that was designed in phase two, a field research methodology was executed in phase three with SPOs and farmers in Colombia, Côte d'Ivoire, and Honduras. In total, the study engaged with eight SPOs, two in Colombia, three in Côte d'Ivoire, and three in Honduras; one SPO per country was a non-Fairtrade SPO, while the others were part of the Fairtrade network. Up to 10 interviews per country were conducted with SPO staff, and up to three focus groups were employed with farmer members (one focus group per SPO). The goal of these activities was to assess the perspectives of SPO leaders and member farmers on the extent to which Fairtrade incentivises or de-incentivises deforestation prevention and forest protection through its interlocking interventions. A Realist Evaluation approach was employed for this purpose, as it allowed for a deeper exploration of the established Program Theory. Specifically, it allowed for further analysis of how Fairtrade works to achieve certain outcomes in various contexts, and why diverse actors make certain decisions in response to different interventions.

In addition, a quantitative phone survey was conducted amongst SPO members, using the Lot Quality Assurance Sampling (LQAS) methodology. LQAS is a rapid appraisal methodology that can be used to monitor program implementation and to evaluate preconditions for program success (Rhoda et al, 2010). In total, the survey was conducted with a

random sample of approximately 19 farmers per SPO. The aim of the survey was to i) evaluate the farmer-level activities and behaviours that may influence Program Theory outcomes, ii) triangulate the results of the qualitative research, iii) explore whether other farmers had the same opinions regarding interventions as participants in the focus groups, and iv) further assess Fairtrade's impact on deforestation prevention and forest protection.

As a final step, evidence from the field work was analysed and presented to the participating Fairtrade SPOs via online validation workshops, two hours in length. The leaders of these SPOs were asked to comment on and confirm the findings, and clarify gaps in information. In total, two validation workshops were conducted, one for the French-speaking cocoa SPOs in Côte d'Ivoire, and one for the Spanish-speaking coffee SPOs in Colombia and Honduras.

Phase Four: Buyer Interviews

To fill gaps in knowledge post-validation workshops and further triangulate the data, two interviews with coffee buyers were conducted. The interviewees were selected due to their direct and strong buying relationship with the Fairtrade SPOs involved in the study. Through 40-minute online interviews, the buyers were asked i) their perspective on whether and how they expect to monitor and support deforestation prevention, mitigation, and monitoring interventions in collaboration with their sourcing partners, ii) their perception of differences between deforestation-related initiatives led by Fairtrade versus other entities, and iii) their perceived impression of Fairtrade's role overall in the prevention, mitigation, and monitoring of deforestation.

Phase One: Desk Review

Tree Cover Loss and Deforestation Data in the Target Regions

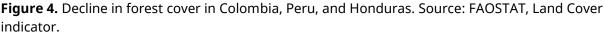
Current evidence from satellite monitoring systems and field studies shows ongoing deforestation and forest degradation in key cocoa- and coffee-producing regions of Latin America and West Africa.¹⁰ According to Global Forest Watch,¹¹ **Honduras** lost 509,000 hectares (ha) of humid primary forest between 2002 and 2023, effectively decreasing the total area of

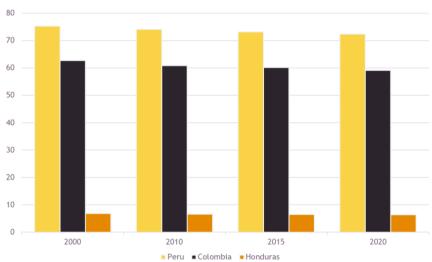
https://www.mightyearth.org/wp-content/uploads/MightyEarthSweetNothingsReportFINAL_UpdatedFeb142022.pdf

¹¹ There is some evidence to suggest that Global Forest Watch shows worse deforestation than what is actually occurring because of a lack of accuracy in the satellite technology used. For example, Global Forest Watch tools have been shown to be unable to differentiate between commercial tree plantations and forests. The tools also struggle to penetrate cloud cover and to detect small-scale deforestation. Finally, the data lacks ground-truthing feedback. For more information, see: https://www.herewegrow.org/media/pages/media/55ff42aeac-1687415629/211224 herewegrow enveritas deforestation white-paper web.pdf. It is also relevant to note that deforestation data is impacted by definitions of deforestation. In the case of Global Forest Watch, according to Curtis et al. (2018), they define "shifting agriculture" as a driver of temporary or permanent deforestation in the context of small- and medium-scale agricultural endeavours, whereas commodity-driven deforestation and urbanisation are linked to permanent deforestation. Meanwhile, agroforestry is not mentioned, and under shifting agriculture and other items, tree cover loss is considered to regrow in their modelling.

humid primary forest by 24%. Tree cover also decreased by 18% between 2001 and 2023. ¹² Meanwhile, **Colombia** lost 1.99 million ha of primary forest between 2002 and 2023, decreasing the country's total primary forest by 3.6%. Between 2001 and 2023, tree cover decreased by 6.6%. ¹³ In **Peru**, other studies have shown that the Peruvian Amazon¹⁴ lost an average of 132,122 ha of humid forest per year between 2001 and 2021. ¹⁵ The most recent hotspots of tree cover loss were found in the centre and north of Peru, with the departments most affected between 2001 to 2023 being Loreto (889,000 ha), Ucayali (790,000 ha) and San Martín (719,000 ha). ¹⁶

Data suggests that between 1990 and 2015, **Côte d'Ivoire'**s forest cover declined from approximately 7.9 million ha to 3.4 million ha, and tree cover loss has recently been occurring at a 2.3 times higher rate since January 2019 than it was between 2001-2017 (Kouassi et al., 2021). **Ghana**, meanwhile, lost 1.64 million ha of tree cover between 2001 and 2023. By some estimates, the country has lost 60% of its forests in the last half-century.





¹² https://www.globalforestwatch.org/dashboards/country/HND/

¹³ https://www.globalforestwatch.org/dashboards/country/COL/

¹⁴ Peru contains approximately 70 million hectares of Amazon territory, which accounts for 60% of the country's landmass. These 70 million hectares constitute 7% of the remaining primary forest area in the Amazon (Pokorny et al., 2021; Blackman, et al., 2017).

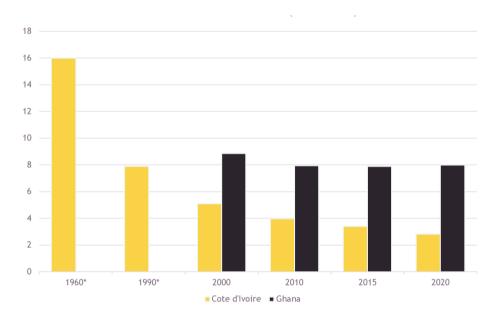
¹⁵https://geobosques.minam.gob.pe/geobosque/descargas_geobosque/perdida/documentos/Reporte_Cobertura_y_ Perdida_de_Bosque_Humedo_Amazonico_2021.pdf

¹⁶ https://www.globalforestwatch.org/dashboards/country/PER/

¹⁷ https://www.globalforestwatch.org/dashboards/country/GHA/

¹⁸ https://satelligence.com/case-study/touton/

Figure 5. Decline in forest cover in Cote d'Ivoire and Ghana. 19 Source: FAOSTAT, Land Cover Indicator.



According to Pendrill et al. (2022), between 2011 and 2015, 90% of global deforestation was driven by agricultural land expansion (Figure 5).²⁰ Similarly, according to Global Forest Watch, trade of commodities is a top driver of deforestation. Within **Honduras**, the trade of commodities is estimated to be the top driver of permanent deforestation, allegedly accounting for a total tree cover loss of 123,300 ha between 2016 and 2023.²¹ Trade is also considered the top driver of permanent deforestation in **Colombia**, with commodity-driven deforestation estimated to have caused a total tree cover loss of 628,100 ha between 2016-2023. Additionally relevant for this study, 52% percent of all tree cover loss in **Colombia**, between 2001 and 2023, happened in Caquetá (791,000 ha), Meta (665,000 ha), Antioquia (592,000 ha), Guaviare (426,000) and Putumayo (335,000 ha), all of which are coffee regions.²² In **Peru**, the trade of commodities also emerges as a top driver of permanent deforestation, causing an estimated total tree cover loss of 414,500 ha between 2016 and 2023.²³

https://www.idhsustainabletrade.com/publication/cote-divoire-cocoa-forests-initiative-2022-annual-report/

https://www.science.org/doi/10.1126/science.abm9267

¹⁹ Data from 1960 and 1990 is from the Cocoa and Forest Initiative:

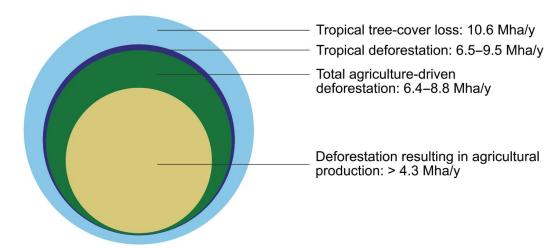
²⁰ Only 45 to 65% of that deforested land became productive within a few years.

²¹ https://www.globalforestwatch.org/dashboards/country/HND/?category=summary

²² https://www.globalforestwatch.org/dashboards/country/COL/?category=summary

²³ https://www.globalforestwatch.org/dashboards/country/PER/

Figure 5: Tropical tree cover loss, deforestation, agriculture-driven deforestation, and deforestation resulting in agricultural production, between 2011 and 2015. Source: Pendrill, et al., 2022.²⁴



Meanwhile, according to Mighty Earth, approximately one-third of total deforestation in **Cote d'Ivoire** and **Ghana** is attributed to the cultivation of cocoa. Satelligence, however, notes that current deforestation rates in many cocoa-producing areas are low, and that there has been a clear decrease since 2018. Satellite data of the Blommers supply chain shows that deforestation rates have been consistently low between 2001 – 2021, with only 0.17% of deforestation happening within farm boundaries and 0.098% happening in areas directly surrounding cocoa farms. The low deforestation rates reported may be due to the fact that cocoa production is located in protected areas; in 2019, 25% of the total area under cocoa production in **Côte d'Ivoire** was located within such protected areas.

While global data demonstrates that trade and worldwide consumption of commodities is linked to tree cover loss and deforestation, it also indicates deforestation may be decreasing in key cocoa- and coffee-producing areas.³⁰ As a result, further contextualization is needed. The

²⁴ The authors considered a vast number of recent pantropical assessments of deforestation drivers for their own assessment. They found that in policy and research communities, most pantropical assessments are derived either from Global Forest Change or from Food and Agriculture Organization (FAO)'s Forest Resources Assessment.

²⁵ https://mightyearth.org/work/protecting-nature/deforestation-monitoring/

²⁶ https://satelligence.com/satelligence-is-helping-the-cocoa-sector-prepare-for-the-eudr-heres-how/

²⁷ Blommers is North America's largest cocoa processor; they purchase from 40,000 farms in Côte d'Ivoire, Ghana, and Ecuador.

²⁸ https://satelligence.com/case-study/bringing-sustainable-cocoa-to-life-by-partnering-with-blommer-to-combat-deforestation/

²⁹ https://trase.earth/insights/cocoa-exports-drive-deforestation-in-cote-d-ivoire

³⁰ Indeed, Orozco-Aguilar et al. (2021), link cocoa cultivation to reforestation and tree cover change in Peru and Nicaragua, noting that, in Peru, i) the cocoa cultivation model as promoted by private investors, ii) access to specialty markets, and iii) other financial incentives, can drive enhanced forest cover. They reach this conclusion after analysing official statistics, land-use trajectories, satellite imagery, and discourse of country experts. However, 45% of those country experts still noted that cocoa cultivation and expansion for small-scale agriculture were main drivers of deforestation. Other drivers included livestock farming and timber harvesting from legal and illegal sources, and the expansion of palm. The authors furthermore concluded that while private companies are adopting and investing in strategies to curb deforestation, evidence suggests limited impact overall (Orozco-Aguilar et al., 2021).

next section of this report summarises the key drivers of deforestation in the cocoa and coffee sectors, putting the data into context.

Key Drivers of Deforestation

Market Factors: Trade and Low Prices (Contributing to Negative Economic 'Dispositions')

While evidence does suggest that cocoa and coffee farmers are in some cases converting forest land to agricultural land (Bymolt et al., 2018), many scholars have noted that it is the neo-liberal market's prioritisation of economic growth that is the true driver of deforestation, combined with a lack of compensation for commodities (Steffen et al., 2011; Ingram et al., 2020; Orozco-Aguilar et. al, 2021). A lack of compensation denotes externalized costs, as cocoa and coffee farmers and their communities assume several activities as a result of agricultural production, the expenditures for which are not accounted for in the commodity price. In the context of the PEDR framework, these realities and externalities represent negative economic 'dispositions.' In response to such dispositions, farmers may choose to convert land as a growth strategy, converting shade or agroforestry systems into full-sun systems, or, more likely, conducting slash and burn expansion into forested areas in an effort to establish new plots alongside existing ones. This conversion of land is seen as an opportunity to increase yield in the short-term and capture immediate economic opportunity. Converting forest land may also be a corrective action, as often, farmers will seek new land with already fertile soil and less exposure to pests and diseases to continue production if their previously managed land is no longer viable. Relatedly, farmers' existing land type may reduce viability, further encouraging expansion as a corrective action, or farmers who do not stand to inherit land may choose to establish and convert new plots.

Low market prices are also a key factor in reducing the viability and productivity of existing agricultural landscapes. Establishing sustainable production systems on existing plots (e.g. renovation and rehabilitation, agroforestry, "climate-smart" agriculture or regenerative agriculture) is expensive, and market prices fail to cover costs related to environmental protection (Ingram, et al., 2020; SEO & KIT, 2022), let alone living income (SEO & KIT, 2022; ETG | Beyond Beans, 2022; Kouassi et al., 2021; Orozco-Aguilar et. al, 2021). Over time, this can lead to ageing and degraded cocoa and coffee parcels, depleted soils, and low yields, which, combined with the rising costs of inputs and inflation, can further limit the value farmers obtain from their production, and therefore their ability to reinvest in sustainable practices. A study by Kroeger et al. (2017) highlights this phenomenon, which is further confirmed by the World Resources Institute and De Beule et al. (2014), who reported on cases of deforestation for industrial cocoa farming in Peru as well as in the Democratic Republic of Congo (DRC) and Cameroon. In the case of the DRC, people reportedly engaged in slash and burn practices because freshly deforested areas provided better soil fertility, enabling higher cocoa

³¹ Much of the literature references the term "climate-smart" agriculture. This is an ambiguous term that is often defined differently by diverse actors. Where possible, the definition of "climate-smart" agriculture has been provided as it was operationally defined in the context of the referenced article.

productivity (and profitability, even in light of prevailingly low prices) for 10-15 years (De Beule et al., 2014).³²

Beyond soil fertility, farmers in the DRC were also encouraged to migrate to and establish new farming areas as a result of the following factors: willingness of local chiefs to sell land, improved road networks near the land, and nearby buyers offering higher prices and extension services (De Beule, et al., 2014). This example demonstrates that while persistently low market prices are linked to deforestation, as they contribute to poverty and an inability to invest in sustainable resource management³³ (Ingram et al., 2020), deforestation can also be driven by market upswings (Bymolt et al., 2018; Kouassi et al., 2021), as farmers will see growth potential. This may especially be the case at present (i.e. May 2024); as the cocoa market price hits record levels, this may present a 'proposition' to farmers that could lead to new or expanded cocoa farms.³⁴ Furthermore, the presence of supportive buyers and new roads may also be considered 'propositions' in the context of the research from the DRC, and may lead to farmers engaging in deforestation and forest degradation.

Institutional Factors: Governmental and Corporate Policies and Resources

Beyond market factors, institutional policies play an important role in influencing actions that may lead to deforestation. In a study about the intersection between deforestation and cocoa farming in Côte d'Ivoire and Liberia, Ruf (2021) identified governmental policy (and lack of follow-up) as a main driving factor (i.e. negative institutional 'disposition') of deforestation. After independence, certain policies in Côte d'Ivoire encouraged migration, but there was statewide inaction when migrants engaged in deforestation for livelihood development, despite the country's commitment to 'zero deforestation.' Additionally, transnational corporations and other institutions encouraged chemical inputs and/or expensive fertilisers, which, when applied, deplete soils and lead to tree cover loss (Ruf, 2021).

Meanwhile, forest loss in Peru has also been attributed to state and corporate policies that encouraged colonisation and agricultural development in the Amazon. The policies, including road building programmes and agricultural credit, led to market access opportunities, but also to deforestation, with the highest incidence being within 20 kilometres of main roads (Valqui et al., 2014). In 2011, Peru passed a national forest law to promote agroforestry and prevent producers from cultivating in forest areas (Pokorny et al., 2021), but its implementation is dependent on state capacity, which has been evidenced as weak through the government's failed attempts to enforce conservation and control illegal and informal activities (Weisse & Naughton-Treves, 2016). Such activities in buffer zones still occur in the country (Rainforest

³² In addition, according to IDH and Earthworm, in the past 30-50 years, the majority of cocoa farms in both Côte d'Ivoire and Ghana were established by primary forests having been gradually transformed into secondary forests, cash and food crop plantations, and fallow land. Even within protected forest reserves in the Cavally region, farmers reportedly still plant cocoa in some cases despite possible repercussions due to migration patterns, lack of available fertile land, and poor yields on other land. Sourced from https://www.idhsustainabletrade.com/publication/cote-divoire-cocoa-forests-initiative-2022-annual-report/ and https://www.earthworm.org/news-stories/reflections-from-my-trip-to-cavally-forest-reserve.

³³ According to Ruf et. al, (2015), low prices also encourage farmers to clear forests when doing so is cheaper than buying and applying the recommended fertilisers for less-fit land. Low cocoa prices may also reduce the price of land itself, which encourages new forest land purchase by migrants who may clear it for production.

³⁴ https://www.ifpri.org/blog/global-cocoa-market-sees-steep-price-rise-amid-supply-shortfall

Alliance, 2021), demonstrating ongoing challenges with the rule of law and the importance of oversight.

Biophysical Dispositions: Climate Change

Cocoa and coffee are highly sensitive to temperature shifts, and anthropogenic climate change is causing current landholdings to become unfit for their cultivation. In some cases, this renders agricultural investments ineffective or difficult, as production will or may not be possible even under improved circumstances and proper land management. This scenario is expected to lead to further tree cover loss as farmers feel forced to transition forests to agriculture to maintain their livelihoods on new, more viable plots of land (Pham et al., 2019). Already in the second half of the 20th century in Côte d'Ivoire, cocoa production moved from a drier east to a wetter southwest,³⁵ while in Peru, an analysis performed by the Rainforest Alliance (RA) for Jacobs Douwe Egberts in 2021 concluded that the expansion of coffee-growing areas upwards as a result of climate change represents the main driver of deforestation in the country. The authors further note that protected and high-conservation areas are at a high risk in Peru, and that a significant proportion of land is at risk of slash and burn practices by small farmers (Rainforest Alliance, 2021).

Cultural Dispositions: Educational Factors and Farmer Knowledge

Migrant or non-migrant and new or existing cocoa and coffee farmers may also contribute to deforestation if they lack the knowledge to jump-start or continue 'deforestation-free' production systems on new or current landholdings. Poor agricultural practices due in part to lack of access to information, such as information related to the proper use of fertilisers and herbicides, can contribute to soil degradation and tree cover loss, (Kouassi et al., 2021) and the general inability to transition to improved methods in the future. In a study based on adopter perception theory, ³⁶ Meshesha et al. (2022) state that low adoption rates of "climate-smart" agricultural innovations among smallholder farmers in Sub-Saharan Africa are due to, among others, institutional weakness and lack of awareness and capacity among farmers. The innovations the study looked at included improved crop varieties, crop residue management, crop rotation, compost, intercropping, row planting, soil and water conservation, and agroforestry.

³⁵ Perceived availability of forest land for planting (Ruf, et al., 2015) as well as the potential of higher prices for cocoa (Kouassi et al., 2021) were additional drivers in this case.

³⁶ Adopter perception theory argues that adoption rates of agricultural technologies are determined by the perception of the perceived attributes of those technologies.

³⁷ In the case of this article, "climate-smart" agriculture is defined as a type of production that, in light of climate change, ensures food security through climate resilience and adaptation. GHG reduction strategies are also noted as relevant. The study further identifies food security, climate change adaptation, and mitigation as the three pillars of "climate-smart" agriculture.

Interventions Proven Effective in Curbing Deforestation

This section analyses past evidence related to the impact of certain interventions and practices (which may also be considered 'propositions') on curbing deforestation. One major limitation of past studies, however, is their attempt to isolate only one approach for analysis, such as voluntary sustainability standards (VSS), when organisations that offer VSS also engage in public-private partnerships, due diligence, and more. In this way, many scientific articles and evaluation studies failed to recognize that interventions are overlapping, and in some cases, even overly attributed certain effects or outcomes (i.e. encounters or responses) to one intervention alone. In light of this, the categories defined in Ingram et al. (2020)'s meta-review of 'zero-deforestation value chain' interventions/approaches were adopted for this study to categorise and guide the evidence base of interventions that curb deforestation, as the review specifically spoke to how interventions work in tandem. While recognizing the challenge of separating the impact of overlapping approaches, the meta-review still attempted to categorise interventions into six categories (see Table 1 for category definitions); for the purposes of the present report's organisation, evidence from the desk review has been located under one of these six categories, based on which approach seemed to be the most driving, or the most relevant, in the article.

Table 1. The six types of approaches/interventions that curb deforestation, as categorised by Ingram et al. (2020)

Intervention	Definition
Voluntary Sustainability Standards (VSS) approaches	VSS are broadly defined as private standards to which producers (or in some cases, worker organisations and trading partners) voluntarily adhere, requiring them to improve their production and/or trading practices across a variety of sustainability indicators. In return, producers (or others) become certified, which helps them to gain access to niche markets and higher prices for their products. To ensure accountability, auditing of these standards is done by third parties. VSS are also programmatic in nature, and typically consist of different interlocking mechanisms of which the most important are standards (codes of conduct), internal management system requirements (to allow for group certification), traceability requirements and systems, independent verification or certification, and consumer-facing labels. In some VSS, such as Fairtrade, producers receive minimum prices and a price premium for their commodity.
Regulatory approaches	Regulatory approaches include state regulations and government policies that govern commodity value chains and seek to govern the landscapes from which the commodities originate, as well as the actors in those value chains. The focus and location of authority and legitimacy is with the state, which is considered the main actor in regulatory approaches. Regulatory approaches also apply legal mechanisms on land use and commodity trade to prevent and/or limit deforestation. They are powerful in demarcating lands (for example, as protected areas) but also in guiding management and production practices of commodities. Regulatory approaches can include legal instruments such as moratoria on deforestation in specific sourcing areas, and they can set quality or other standards for commodity production to place emphasis on deforestation (e.g. norms for legal traceability of a commodity to a specific sourcing

	location).
Landscape and jurisdiction approaches	Landscapes and jurisdictions are defined by spatial boundaries. A jurisdictional initiative takes place at a scale that matches the administrative boundaries of local, regional, subnational, or national governments. Such approaches typically focus on resource-rich regions and promote adoption of sustainable production across landscapes. The focus and location of authority and legitimacy in various jurisdictions may be shared between different actors, or it may be dominated by a leading actor (civil society, government, and/or private sector). Landscape approaches, meanwhile, are regularly used in conservation, natural resource management, and REDD+ projects. They are characterised by inter- and multidisciplinary approaches, a defined place for engagement by stakeholders, cross-sector engagement, and a focus on reconciling multi-functional and competing land use objectives at many scales. The jurisdictional approach is often synonymous with a landscape approach, though landscape approaches usually cover smaller areas. Jurisdictional approaches can be used to scale the impact of landscape approaches across larger geographic areas (i.e. beyond single company- or community development projects), and across multiple sectors and stakeholders.
Corporate pledges and programmes	Individual corporate initiatives as well as actions by associations or groups of companies are a form of corporate social responsibility and self-regulation. Businesses pledge to certain goals and then monitor compliance, typically in line with the law, ethical standards, and national or international norms. Businesses may also engage in actions that appear to further a social or environmental good, beyond the interests of the firm and beyond what is required by law. Corporate programmes and pledges have increasingly been used by traders, exporters, processors, and manufacturers since the mid-2000s, who have offered packages of interventions or services, such as, among others, training, credit, and farm inputs (e.g. fertilisers, agrochemicals, seedlings, equipment, and more). These services are often provided to farmers and farmer organisations as a way to secure supplies of a commodity of specific type or quality.
Public-Private Partnerships (PPPs)	The term PPPs encompasses platforms, networks, associations, partnerships, and/or agreements between the private and public sectors. Research institutions, civil society organisations, and/or non-governmental organisations also often collaborate in PPPs, which have a common goal to reach some aspect of sustainability through declared policy, programmes, or plans of action. PPPs are unique in that they are partnerships between public and private sector actors, but multi-stakeholder initiatives may also be relevant for this category of intervention, even if they involve only civil society and private actors, or civil society and public actors.
Due diligence approaches	Due diligence refers to the investigation or exercise of care that a reasonable business or person is expected to engage in before entering into an agreement or contract with another party, in order to avoid committing a tort or offence. Due diligence can be a legal obligation or a voluntary exercise. To conduct due diligence in commodity value chains, companies and financial institutions often trace back the supply of commodities to the original production systems and assess negative environmental and social impacts that may result along the value chain. Due diligence plays an important role in translating zero-deforestation commitments into approaches that seek to prevent, mitigate, and make transparent negative (or positive) impacts of companies' activities on forests and people throughout their value chains. Beyond investigations, voluntary

disclosures, and exercises of care like traceability mechanisms, third-party campaigns and moratoriums can also play a role in due-diligence approaches.

Voluntary Sustainability Standards (VSS)

A number of studies and meta-reviews found VSS to be partially effective in curbing deforestation in cocoa and coffee value chains (Ingram et al., 2020), and were able to associate VSS with reduced deforestation and/or increased tree cover. In Colombia, for example, Rueda et al. (2015) found using satellite data that the RA VSS program led to enhanced tree cover in the Santander province. Specifically, forest cover in the coffee region in which the RA certification program was introduced increased significantly more than in the region with noncertified producers. Takahashi and Todo (2017), meanwhile, compared the characteristics of forest coffee areas in Ethiopia with and without the RA certification, and found that forest density had increased slightly in certified forest coffee areas, while those areas without certification had degraded significantly.

Indeed, as both upstream and downstream actors adopt VSS and their interlocked components of standards, certifications, audits, premiums, traceability, and more, they take action to limit deforestation and/or increase tree cover. Through participation in VSS, among other social and human-rights related actions (especially in the context of Fairtrade), producers adopt certain improved environmental practices, such as agroforestry, leading to key environmental benefits (Kouassi et al., 2021). Meanwhile, as consumer demand for products labelled as environmentally friendly and/or socially responsible grows, companies support producing partners to meet VSS requirements and adopt best practice. Ongoing consumer and client interest in sustainability further encourages more farmers to transition to improved farming methods for improved market access, thereby curbing deforestation even further.³⁸

However, while VSS may be linked to deforestation-free production systems, which makes VSS attractive to private sector actors who are looking to reduce deforestation risks in their supply chains, the available evidence does not necessarily demonstrate that VSS address root causes of deforestation or even solve the issue at scale. In a study for the World Bank Group, Kroeger et al. (2017), highlight that certified producers are generally located in areas already in accordance with different baselines, and that producers who already live in low deforestation risk areas are more likely to become certified in the first place. The authors additionally note that producers who are deforesting or encroaching into protected areas are not able to become certified (Kroeger et al., 2017). This evidence demonstrates correlation between VSS and reduced deforestation, but not causation.

_

³⁸ On the other hand, perceptions about increased market access may also encourage expansion, which could lead to deforestation. Takahashi and Todo (2017), for example, argue that certifications can incentivize producers to expand their agroforestry areas, leading to deforestation if those areas are converted from forests. While true, findings such as these must be contextualized with additional information about the relevance of agroforestry. At present, evidence varies as to how much cocoa and coffee is grown under agroforestry globally, but the evidence of agroforestry's benefit is clear. Agroforestry is considered a very important form of responsible production, and maintenance of agroforestry systems contributes to de-incentivising deforestation. However, as the EU considers gross and not net deforestation, the conversion of forest to agroforestry for crop production is understood as deforestation, even if it is of critical importance that farmers continue production in responsible forms for their livelihood development.

In addition, it is not always clear from the literature which specific practices required by VSS lead to reduced deforestation, nor are additional factors of relevance always noted, such as the presence of other interventions. Table 2 below attempts to summarise potential factors of relevance that must be taken into account when analysing the impact of VSS, both positive and negative.

Table 2. Factors of relevance when considering the impact of VSS on deforestation-related outcomes

Farmer perception

Pyk & Abu Hatab (2018) found that farmers in Tanzania were motivated economically and socially to join the Fairtrade certification, but showed limited awareness of the system's environmental aspects. Female farmers, youth, and those with larger farms, higher incomes, and more experience, were more aware of the environmental benefits of the Fairtrade system, but by and large, beyond the pricing scheme, farmers believed that certification would mostly serve to increase their competitiveness and provide them better access to information on markets and market trends. This demonstrates that the socioeconomic benefits of VSS (real or perceived 'propositions') play a role in their outcomes. Additionally, research in the Blue Nile Highlands of Ethiopia showed that there was a correlation between adoption of agroforestry and the perception that this innovation leads to food security (Mesheha et.al., 2022). This once again highlights the importance of perception of socioeconomic benefit (real or perceived) in curbing deforestation.

Supply chain organisation

Meemken (2020) notes that supply chain organisation plays a decisive role in deforestation-related outcomes. As one example, Mitiku et al. (2017) claim that effects of certification overlap with those of membership in SPOs, making it very difficult or nearly impossible to disentangle the impact of certification from the impact of SPO membership.³⁹ Meanwhile, Orozco-Aguilar et al. (2021) note that cocoa cultivation functions as a key agent of reforestation in Nicaragua due to the sector's overall commitment to research and development, innovation, and experimentation with such things as new varieties and payment for ecosystem services (PES). While many of these activities are taken on by SPOs that belong to VSS, they are not required by VSS, demonstrating that positive environmental outcomes result from a variety of encounters/engagements based on one's supply chain makeup. As will be seen throughout this report, however, SPOs belonging to VSS are more likely to be involved in a variety of sector-wide activities.

Regulatory Approaches

Ensuring the rule of law (e.g. no deforestation of protected areas) and carrying out proper and careful monitoring and management of the risks inherent to sourcing and procurement practices (i.e. due diligence) are considered regulatory approaches that reduce deforestation and other negative environmental impacts of commodity production and trade. Enforcing laws and regulations at a producer level can be done in a variety of ways, with many actors tackling unique roles to streamline the process (Ingram et al., 2020; Kouassi et al., 2021; Orozco-Aguilar et al., 2021). Within the reviewed literature, national public strategies emerged as one key regulatory approach to addressing deforestation (Carodenuto, 2019). Often called

³⁹ Due to its unique statutory 50% producer co-ownership model, this applies in particular to the Fairtrade system and its certification.

REDD+ strategies (Reducing Emissions from Deforestation and Forest Degradation), this approach typically includes targets and actions on sustainable forest management, conservation, and the enhancement of forest carbon stocks. 40 Separate from international REDD+ schemes, governments in producing countries also establish other unique initiatives to curb deforestation, such as the promotion of 'zero-deforestation' commitments among suppliers, land tenure campaigns, and formal protection. Table 3 provides a summary of evidence outlining the impact of these approaches, alongside an indication of their success.

Table 3. Summary of evidence related to the success of regulatory approaches

REDD+ strategies

According to the literature, Côte d'Ivoire and Ghana's national REDD+ strategies have focused predominantly on the cocoa sector as a key entry point to reducing deforestation at national and subnational levels. The strategies have often ensured coherence with private sector commitments and actions (Carodenuto, 2019). As each strategy is ultimately managed by the state, however, and resources are often insufficient, these REDD+ programs have been slow in meeting their targets. In addition, as they involve actions such as formal protection, they face additional challenges, which are outlined below.

Other governmentled initiatives

In an effort to reach zero gross deforestation by 2025, the Colombian government included in its 2018–2022 national development plan zero-deforestation agreements for five agricultural value chains, including cocoa and coffee (Rodriguez, 2021). By 2022, the signatories of the coffee agreement accounted for 90% of coffee exports in the country (15 companies in total), while signatories to the cocoa agreement accounted for 85% of the cocoa exports (six companies in total) (Rodriguez, 2021). While this is a positive move, results are still pending. Meanwhile, both Côte d'Ivoire and Ghana have pledged to implement national cocoa traceability systems by the end of 2019 (and renewed the pledge in 2021), but so far, these efforts are yet to materialise (Mighty Earth, 2022; Kouassi et al., 2021; Orozco-Aguilar et al., 2021).

Land titling

Land tenure is, in some cases, increasingly important in the cocoa and coffee sectors' struggles with deforestation and traceability, as when farmers do not have certainty over their land rights, either because of a lack of a formal title or because many actors are making claims to the same land, they may be less willing to invest in long-term sustainable management on that land. In Ghana, for example, where roughly 80% of land is governed through customary tenure arrangements, with power vested in chiefs or similar authorities, farmers reported fear of planting or maintaining shade trees due to unclear legal ownership of their land and trees. Meridia, A startup which gained traction by working with traders and manufacturers on land titling for producers, found that when farmers do have land title documentation (and trust in that documentation), there was an approximate 22% increase in productivity and a 15.5% increase in income. These results were mostly attributable to farmers' having legal rights for their land, which led them to invest without fear of losing profits

⁴⁰ The concept of REDD+ was first introduced at the United Nations Framework Convention on Climate Change (UNFCCC) in 2005, and gained support during the Paris Climate Agreement in 2015. REDD+ strategies have also benefited from recently renewed donor support.

⁴¹ Unclear legal ownership can also lead to risk of exploitation by timber contractors (ETG | Beyond Beans, 2022; García-Morán, 2021; Orozco-Aguilar et al., 2021).

⁴² https://www.meridia.land/products/land-titling; https://www.meridia.land/cases/clap

(Schulte et al., 2020). Access to training and inputs for the land titling process were also hugely relevant. While not mentioned in the study, functioning governance systems, a lack of corruption, and proper administration of land management is also key to the success of land titling initiatives.

While these results do not necessarily link land tenure to reduced deforestation, they do demonstrate that such regulation can lead to farmers' increased willingness to invest in their land. With proper training and support, farmers can also take action to reduce deforestation. In the Peruvian Amazon, for example, Blackman et al., (2017) used community-level longitudinal data to suggest that, on average, land titling reduces forest clearing by more than three-quarters and forest disturbance by roughly two-thirds in a two-year window when the title is awarded in year one. The authors suggest that effects may be even more pronounced where increased monitoring/support is present.

While land titling may be a relevant solution in some cases, it is not a panacea. In many indigenous cocoa- and coffee-growing communities, for example, individual land titles are not common, as collective ownership is the norm. While it is still important for indigenous communities to have guaranteed legal rights to their land – collectively owned or not – the approach to these legal protections or even the incentives for them may differ. If indigenous communities are more likely to maintain forests given their cultural heritage, for instance, efforts to ensure land ownership may be more related to cultural preservation than deforestation risk reduction.

Formal protection

The cases of Mont Peko National Park and Taï National Park in western Côte d'Ivoire provide some insight into the mixed impact of formal forest protection. Mont Péko National Park is one of the highest protected areas in the country, and while this site saw the eviction of illegal cocoa farms between 2013 and 2016, Mighty Earth's satellite and field data confirmed that in 2020 alone, over 350 ha of forest were still lost (Mighty Earth, 2022). In contrast, at Taï National Park, which has the largest remaining intact forest in West Africa and is surrounded by cocoa farms, agriculture incursions are minimal and there are reported successes in limiting deforestation (Mighty Earth, 2022 & Kouassi et al., 2021). According to Kouassi et al. (2021), these successes may be partly attributable to the fact that protected areas are more likely to be the focus of conservation initiatives than non-protected areas. Further evidence from Ghana also notes that formal protection can cause confusion, as some communities may claim to hold rights to protected areas, allowing them to deforest if they choose (Mighty Earth, 2022).

Landscape and Jurisdictional Approaches

The literature on landscape and jurisdictional approaches suggests that many programs falling under this category are often considered pilots, leading to a lack of longitudinal impact data (Ingram et al., 2018b; Ros-Tonen et al., 2018; Kessler et al., 2021). By design, they also face multiple challenges, such as difficulty related to the management and sharing of risk and benefits among stakeholders, and heavy reliance on public sources of funding. Some landscape approaches do benefit from private sector support, but across the board, insufficient incentives may exist for many private sector actors to participate in landscape programs, as supply chain

partners often require that the initiatives they support have a significant supply-chain focus. In other words, companies want to target the farmers in their own supply chains and focus on production. Regardless, in a baseline study for the UK government's Partnerships for Forests (P4F) programme, Kessler et al. (2021) note that landscape and jurisdictional strategies made up of several impact pathways are key to curbing deforestation. They furthermore indicate the importance of focusing on productivity and livelihoods within such approaches; empowering producer organisations as viable businesses and support networks; catalysing companies and other value chain actors to do their part; incorporating forest, landscape, and government actors at different scales; and building enabling conditions to support scaling and systemic change. Table 4 below provides additional insight into the factors of relevance for successful landscape approaches.

Table 4. Factors that impact the success of landscape and jurisdictional approaches

Need to prioritise both production and protection The Accessible Soils and Sustainable Environments (ASASE) program combines six interconnected strategies (i.e. propositions), including land titling, registering multipurpose trees, individual farmer coaching, the set-up of community resource management committees, support for restoration of degraded lands, and village savings and loans associations (Ferrero, CFI Progress Report, 2022) to achieve its goals. As the program works with both cocoa-farming and non-cocoa-farming communities, it is a self-described landscape approach, though it does not include strategies usually present in such interventions, such as support for diversification, market access of different products, and off-farm employment (IDH, 2021). The extent to which those additions are necessary for long-term success is unclear, as there is only activity- or output-related evidence available, rather than outcome- or impact-related data. Regardless, the outputs at present do show a focus on both commodity production and forest protection. For example, farmers have been trained in both the adoption of improved farm management practices and in forest conservation and reforestation.

Formal, noneroded agreements key to ensuring protection Co-funded and implemented by Touton and its partners,⁴⁵ The Partnership for Productivity Protection Resilience in Cocoa Landscapes in western Ghana is a P4F project that, similar to ASASE, focused on forest protection as well as "climate-smart"⁴⁶ cocoa production in an area of the country where deforestation peaked in 2018, with 4,575 ha of forest loss. In this project, production-related support was conditional upon farmer's establishment of forest protection goals.⁴⁷ Kessler et al. (2021), however, noted that the production interventions were advancing earlier and faster than the protection interventions, perhaps due to Touton simultaneously launching 'Rural Service Centers' to provide agricultural and financial services to cocoa farmers, including finance, inputs, and good agricultural practices training. This

⁴³ ASASE could also be categorised as a PPP project, as it is implemented by ETG |Beyond Beans, Meridia, Tropenbos Ghana, and the Ghanaian Ministry of Lands and Natural Resources with funding from the Netherlands Enterprise Agency, Ferrero, and more.

⁴⁴ https://www.idhsustainabletrade.com/uploaded/2021/02/Production-Protection-Inclusion.pdf

⁴⁵ In addition to Touton, partners include Agroeco, SNV, Nature Conservation Research Centre, Cocobod, and the Forestry Commission.

 $^{^{46}}$ "Climate-smart" in this case is not well-defined, but references activities such as shade tree planting or the application of best agricultural practices.

⁴⁷ <u>https://3prcocoalandscapes.com/about-district</u>

essentially ensured that production-related support outweighed protection-related support and eroded the link between the two. Conversely, in a different P4F project implemented by RA and ofi called Partnership for Livelihoods and Landscapes in western Ghana, the P4F holistic landscape approach was more effective as communities signed formal protection agreements as a precursor to the incentives provided.⁴⁸

Forest protection committees successful with the right support

Recent jurisdictional interventions demonstrate the relevance of democratically formed committees in leading and executing conservation efforts. These committees are especially important in communities that live near forests, either protected or unprotected. Though there are myriad ways that protection committees can operate, by and large, they work to patrol and manage forest areas and control forest access as possible.⁴⁹ In some cases, they are legally recognized by the state and given joint power to enforce their objectives, which ensures even greater results. The evidence suggests that the stricter a group's focus is on conservation, and the more they receive targeted financing for their efforts, the larger their impact can be (ETG | Beyond Beans, 2022). Conversely, when groups are not provided with adequate resources, their efforts may fail. In northwest Ghana, a project jointly funded by RA, ofi, Touton, and others established Landscape Management Boards to support community management of the Suhuma Forest and Sui River Forest Reserves (Mighty Earth, 2022). Mighty Earth's satellite data, however, showed ongoing deforestation, and failure was attributed to the work being assigned to volunteers, with no clear indication of how local communities would benefit economically from the forest they were protecting. In contrast, in a project to protect the Bia National Park, very limited deforestation has been reported, allegedly due to higher public resources becoming available for more and better trained and equipped personnel (Mighty Earth, 2022).50

Corporate Pledges and Programmes

The private sector is increasingly relevant in interventions aimed at mitigating or preventing deforestation. Companies' adoption of VSS is a key driver of each standard's success, REDD+ frameworks seek to build coherence with private sector initiatives, and private sector resources are needed in landscape and jurisdictional approaches. Furthermore, zero-deforestation commitments by companies are shown to be moderately effective in reducing

⁴⁸ https://partnershipsforforests.com/partnerships-projects/rainforest-alliance-olam-partnership-livelihoods-forest-landscape-management-western-ghana/

⁴⁹ Of note, some community groups are enmeshed with the areas they are protecting, such as is often the case with indigenous communities who are already united towards forest protection, water resource management, etc. In these cases, community groups/protection committees may emerge organically. In other cases, forests are located on private lands and community groups may need to be appointed, even if not enmeshed in the area to start.

⁵⁰ In other words, democratically formed committees that lead and execute conservation efforts may become more successful if they are located in communities close to forests; have legal recognition and power to enforce their objectives; have a stricter focus on conservation; and receive targeted financing, training, and equipment. A lack of resources for these committees (e.g. when work is assigned to volunteers or when no economic benefits of protection are perceived) can lead to failure. These findings may relate to the Fairtrade Premium Committee. As these committees are provided with agency/legal recognition, they can take more targeted action. In addition, these committees decide on use of financial resources, so participation/buy-in may be strong. Conversely, if farmers do not feel their committees are representing their economic interests effectively, buy-in may decrease.

deforestation, as they can increase demand for other companies to make such commitments. They also require collaboration with farmers in targeted supply chains and regions (Ingram et al., 2020), and request their support for protecting forests. Of course, these commitments leave substantial room for improvement with regard to achieving global reduction goals, and most studies that review corporate pledges do not necessarily reveal what works about them and why, and under what conditions.

One thing that is clear, however, is that many pledges and their respective programmes target livelihoods and incomes as well as deforestation. Indeed, living income programs, or other programmes tied to income increase, may be considered important aspects of deforestation-related intervention strategies as it is clear from the literature that resource access is key to deforestation prevention. Unfortunately, the majority of income-focused interventions do not necessarily target deforestation; rather, the two interventions, while seeking to work in tandem, maintain separate activities and goals, which limits a firm evidence base demonstrating how higher income leads to forest protection in particular. Fontain and Hütz-Adams (2020) additionally note that VSS-related premiums are hard to distinguish from other premium programs (which may be considered 'propositions'), such as quality premiums, which further indicates that income increase comes from diverse programming, which makes it hard to establish links between programs and income increase, and subsequently, programs and reduced deforestation due to income increase.

To build a stronger link between income and reduced deforestation, many companies are increasingly looking toward PES programs, as are public and civil society actors. The Green Climate Fund, for example, has promoted the piloting of results-based payments as part of national strategies (Carodenuto, 2019), or conditional, performance-based incentives for farmers who are preventing forest conversion and enhancing forest carbon stocks (Carodenuto, 2019). The text box below provides for more information about PES and Fairtrade's related policy.

Fairtrade's Approach to Payment for Ecosystem Services (PES)

PES are defined as payments to farmers for the ecosystem (or environmental) benefits that they provide through their efforts. Such payments are usually offered as rewards for best practice, and act as incentives so that farmers keep managing their land in ways that lead to ecological service. As such, PES are considered an important mechanism in promoting conservation. Meanwhile, Fairtrade's own policy on PES indicates support for such payments in the context of deforestation prevention. By rewarding producers for agroecological best practices, such as reforestation or non-deforestation, the system can incentivise action that leads to deforestation prevention.

Fairtrade's policy is informed by research and proven initiatives. Meta-reviews of studies on the effects on PES have shown that they can lead to increases in household income and employment as well as to a reduction in deforestation (Blundo-Canto, et al., 2018; Snilstveit et al., 2019). In establishing their policy, Fairtrade acknowledges the relevance of PES, but also the importance of proper methodologies when building payment structures. With proper methodological framing, PES programmes can lead to positive effects, and avoids greenwashing and/or the creation of bad incentives (e.g. deforestation for the purpose of reforestation to earn income from carbon capture).

Relatedly, political ecologists, de-growth scholars, and indigenous activists critique PES approaches when they are centred on economic growth and forest-as-commodity. Such critics suggest that PES, when not properly incorporated, can disrupt local conservation approaches and systems, and compromise forest-dwelling communities' ability to protect forests in ways they deem relevant. As evidence for their argument, Ravikumar et al. (2023) studied a region in the Peruvian Amazon where alternatives to 'green growth' strategies developed by indigenous groups were eroded, as they stood in contrast to the National Forest Conservation Program, the state's flagship initiative to address deforestation by paying communities for demonstrated reductions in deforestation.

Fairtrade's policy recognises these challenges; by following a bottom-up approach to PES programme development, the system ensures positive impacts that work in tandem with cultural realities.

Public-Private Partnerships (PPPs)

As can be seen from the evidence already reviewed, initiatives where many stakeholders come together to address deforestation are increasingly common, and increasingly necessary to meet global goals. Ingram et al. (2020) even note that a lack of coordinated action by multiple value chain players is an indirect factor that drives deforestation. This is especially true as the public and private sectors (and even civil society) are co-dependent, and misalignment can lead to negative impacts. Carodenuto (2019), for example, notes that many companies are shifting towards less intensification (or intensification for only certain farmer segments) and more diversification of activities and income sources for farming families, which is sometimes misaligned with public-sector support for intensification. If the same farmers are targeted, they may receive mixed messages or even financial support for divergent strategies. For this reason, Carodenuto (2019) recommends alignment on priorities among actors, for example through

three combined 'propositions': i) intensification of cocoa cultivation without expansion, ii) product traceability, and iii) jurisdictional commodity sourcing.⁵¹

Coordinated action not only serves to support strategy alignment among actors, it also leads to concrete results. The Cocoa & Forests Initiative (CFI) is one example of a PPP that first launched in 2017 thanks to facilitation from the World Cocoa Foundation and IDH. Thirty-four companies in the cocoa sector and the governments of Colombia, Côte d'Ivoire, and Ghana also joined CFI seeking to end deforestation and restore forests. In CFI's first few years, the partners mapped over 800,000 farms and company signatories achieved 72% traceability in their direct cocoa supply chains in both Ghana and Côte d'Ivoire. The project did not quantify deforestation in target regions, however, preferring to focus instead on actions that promote reforestation.

CFI 2.0 is the newest iteration of the initiative, and now includes provisions to quantify deforestation, as well as efforts to protect forest areas, secure land tenure, adopt PES, and focus on community engagement and social inclusion. Since 2023, the project has promoted i) farm mapping to ensure sourcing from no/low risk areas, ii) distribution of multi-purpose trees, iii) training on good agricultural practices, iv) promotion of agroforestry, v) efforts for income diversification, vi) improving access to finance, and vii) enhancing women's empowerment. Each of these efforts is intended to work together to curb deforestation, ensure environmentally friendly production, and promote socioeconomic sustainability, but the extent to which intended outcomes may be reached will depend on CFI's measurement mechanisms. This points to the need to not only establish robust initiatives, but also to ensure robust measurement mechanisms that can lead to data sharing on lessons learned as well.

Due Diligence Mechanisms

The primary evidence reviewed for due diligence mechanisms relates to the use of digital tools for traceability and deforestation monitoring schemes. Indeed, public and private traceability systems are gaining in importance, as evidenced through CFI, but they are not yet fully scaled or interoperable.⁵³ In addition, sector-wide, there are few standard operating procedures, and data sources can offer conflicting information. Regardless, digital traceability efforts, which include deforestation monitoring efforts, are important solutions that can recognize and protect the status and value of forests (Ingram et al., 2020; Ermgassen et al., 2022). This is especially the case as the accuracy of digital tools improves, such as satellite imagery. Table 5 below offers additional insight into what may be needed to improve and scale digital deforestation monitoring and traceability.

⁵¹ Carodenuto (2019) notes, "When applied to zero deforestation initiatives, jurisdictional commodity sourcing implies that state governments join forces with business and other stakeholders and commit to ensuring that sourcing within their jurisdictions does not cause deforestation within a given timeframe." This would imply that jurisdictional commodity sourcing refers to efforts such as the EUDR, among other regulations, such as removing subsidies or reforming policies that may incentivise deforestation.

⁵² Despite these robust outcomes, (Ermgassen, et al., 2022) argues that these companies are failing to address risks or map their cocoa when it is sourced via intermediates/indirect supply chains, which can comprise 20-70% of their cocoa. For more information about the program and the impact of direct relationships, see: https://www.worldcocoafoundation.org/blog/introducing-cocoa-forests-initiative-2-0/

⁵³ https://www.nachhaltige-agrarlieferketten.org/en/in-practice/diasca-interoperability-between-traceability-solutions

Importantly, digital tools can also be used to provide digital farmer advisory, ensure accurate accounting, and more. Such use cases may appear less linked with deforestationrelated outcomes, but ultimately can contribute to activities that enhance best practices, and therefore forest conservation, in the long-term. For example, if farmers improve their practices based on digital advisory, this may lead to increased production, more income, and more ability to invest in sustainable production systems. Similarly, increased access to digital information may provide farmers and SPO leaders the insight they need to protect forests. Meanwhile, digital tools that increase access to markets and finance can provide farmers with additional resources to conduct forest protection (e.g. via enhanced price for sustainable products, or via loans for agroforestry transitions) (Petrutiu, et al., 2021).

Table 5. Evidence	Table 5. Evidence suggesting needed improvements for digital deforestation monitoring and traceabilit		
Need for improved accuracy	The hardware that supports due diligence reporting includes mobile tools (e.g. smartphones), surveillance systems (e.g. optical and radar satellites, drones analysing canopy density), and 'in situ' sensors (e.g. farm field sensors, e.g. to predict and monitor weather forecasts and yields; agricultural machinery sensors; and logistics sensors for transport, such as radio frequency identification/RIFD chips). Related or parallel software enables analysis and visualisation of data, as well as predictions of future trends. At present, however, satellite technologies are not always accurate. Increasing accuracy will require ongoing pilot data collection and testing.		
Need for enhanced adoption	Satellite monitoring systems and remote sensing tools are not yet used by many smaller entities, given their price tag and the perception of their complexity to use or incorporate into sustainability strategies. Even among those entities that are already using the tools, there is limited leveraging of resulting data for decision-making (Petrutiu, et al., 2021), and limited data sharing among parties. In a monitoring report of the West Africa Cocoa Programme (WACP), Fairtrade found that SPOs in Côte d'Ivoire face ongoing challenges in collecting data for due diligence, and are furthermore failing to capture value from data sharing and analysis. This is due in part to a lack of training and capacity, but also because the data collection serves several competing and interrelated purposes (e.g. proof of traceability, sustainability, no child labour, and environmental protection). Still, ongoing data collection and sharing is an economic necessity, as without geolocation data, satellite monitoring, or other data collection related to natural resource management, land use, and land use change, SPOs may lose market access going forward. ⁵⁴		
Need for coherence among entities	As the EUDR requires 100% deforestation mapping by 2024 from all suppliers, big or small, digital traceability tools may see increased adoption in the coming years. Unfortunately, this conflicts with parallel cut-off dates and deadlines established internally by companies and certifiers who have developed their own traceability trajectories, meaning that some entities may have to move faster than originally planned, perhaps at the expense of their other initiatives. ⁵⁵ Overall, buyer-driven due		

⁵⁴ Fairtrade is currently supporting data sharing by updating their standards to require that buyers provide SPOs with any relevant geolocation data they may have collected. While some buyers may consider any information they obtained as a result of their own investments as their property, if the data relates to SPOs or their farmers, this data is considered SPO property under the EU General Data Protection Regulation.

⁵⁵ https://www.beslaveryfree.com/articles-blogs/assessing-deforestation-and-climate

diligence can also be limited in impact, as beyond ensuring SPOs' continued market access, such mandates do little to serve the holistic needs of producer communities (WACP Monitoring Report, Third Edition, 2023).⁵⁶

Summary

Ingram et al. (2020) demonstrated that a combination of interventions is most effective in reducing deforestation and forest degradation. The authors note the importance of supporting all producers to adopt the practices of certified producers, given the correlation between VSS and reduced deforestation. However, they note that the capacity of farmers to adopt improved practices may be limited, as farmers face insecure land tenure rights, low market prices, and more. Without the legal or financial ability to invest in best practice, change is not possible, which provides further confirmation that a multi-actor and multi-level approach is needed to address security and livelihoods (Ingram et. al, 2020). With decreased poverty, improved rule of law, and the provision of financial support for transitions to sustainable land management (both inside and outside of VSS schemes), the cocoa and coffee sectors would be better positioned to meet improved outcomes.

Furthermore, it is important to ensure coherence among public and private actions, and fight corruption at all levels.⁵⁷ Additionally, to achieve global targets at greater speeds, supply chain actors must cooperate in joint data collection and data sharing in order to provide insight for various players in the cocoa and coffee value chains (Ingram et al., 2020; Ermgassen et al., 2022). New monitoring systems are revealing which actors are still engaging in deforestation and forest degradation (in evidenced hotspots), and supply chain stakeholders need to non-competitively and ethically communicate this information to the right parties as part of their efforts to properly reduce the risks posed to forests (Ingram et al., 2020).⁵⁸

Phase Two: System-level Stakeholder Interviews

Key Themes

Interviews with Fairtrade stakeholders revealed a number of unique perspectives on Fairtrade's role in curbing deforestation and ensuring forest protection. These perspectives fall into seven thematic categories, which emerged from the interview analysis:

- 1. System-level Awareness of Deforestation Hotspots and Definitions
- 2. System-level Awareness of Drivers and Inhibitors of Deforestation
- 3. Fairtrade's Impact on Deforestation and Related Challenges
- 4. Claiming Correlation vs. Causation
- 5. Need for More Resources and Support to SPOs

⁵⁶ https://files.fairtrade.net/publications/Fairtrade-WACP-MR-3rd-Ed-ENGLISH.pdf

⁵⁷ In a study by Ruf et. al. (2019), the authors argue that corruption among SPO leaders limits impact on farmer livelihoods, demonstrating that VSS, among other interventions, must be effectively managed and transparent, and supportive if they are to have a lasting impact on deforestation.

⁵⁸ Of course, this needs to be done in ways that do not threaten market inclusion.

- 6. Setting and Achieving Targets Alongside External Stakeholders
- 7. The Role of Fairtrade Going Forward

1. System-level Awareness of Deforestation Hotspots and Definitions

Among the top countries and areas that Fairtrade actors considered to be at the highest risk of deforestation, Brazil, Mexico, and Peru were the most frequently mentioned in interviews, followed by Nicaragua and Honduras, in Latin America. In Africa, Côte d'Ivoire and Ghana topped the list, along with Uganda. Liberia was also cited as a risk country by two interviewees, albeit to a lesser extent. Southeast Asia was mentioned as a potentially problematic region, with one respondent emphasising the need to monitor the situation in Papua New Guinea due to the vast expanses of protected forest that could be at risk. Vietnam was cited for additional risk in Southeast Asia, as it is one of the countries where there is a strong tendency towards intensive production.

While several respondents expressed confidence in their estimations, half of the interviewees indicated either a lack of first-hand knowledge on deforestation hotspots, or an inability to respond in full as the topic was not directly related to their area of expertise or focus. One actor additionally stressed the lack of reliable data sources concerning deforestation hotspots. While Fairtrade relies on secondary data⁵⁹ to identify high-risk areas and cases of deforestation, and to understand the current status of forests in relevant countries, not all farms are mapped, and there is evidence to suggest some secondary sources overestimate the extent of deforestation.⁶⁰ In response to this, one respondent noted the relevance of relying on indigenous knowledge of forest cover in areas where technology has yet to be employed to determine risk.

Related to a lack of knowledge is differing definitions of deforestation and risk. At least half of the respondents considered the EUDR definition of deforestation⁶¹ to be relevant, but some interviewees highlighted the fact that this definition is not aligned with Fairtrade's definition of deforestation, nor is it aligned with all national definitions in producing countries. When asked to define "high risk," meanwhile, only one respondent quoted the EUDR text,⁶² while others defined it more broadly as areas where there is still untouched primary forest in

⁵⁹ In particular, data is often drawn from Global Forest Watch, Satelligence, and Trase.earth, among others. Of note, the interview phase for this assignment was conducted a week before Fairtrade announced its <u>partnership with</u> <u>Satelligence</u> to monitor deforestation among certified cocoa and coffee producers globally.

⁶⁰ Many respondents shared doubts about the accuracy and suitability of the current tools used for satellite imagery and remote sensing, claiming that although they seem to be improving, there is still work to be done. However, given that few Fairtrade staff members have expertise in satellite imagery and related fields, their doubts should only be understood as evidence of system-wide perspectives, not as evidence of technological inaccuracy.

⁶¹ The EUDR highlights the <u>FAO definition</u> of deforestation, which establishes that 'deforestation' is "the conversion of forest to agricultural use, whether human-induced or not." In this context, 'forest' is "land spanning more than 0,5 hectares with trees higher than 5 metres and a canopy cover of more than 10%, or trees able to reach those thresholds in situ, excluding land that is predominantly under agricultural or urban land use."

⁶² While the criteria under which high-risk countries or areas will be classified in the EUDR is, as of April 2024, still pending, the latest text establishes that "high-risk countries or parts thereof (...) shall be based on an objective and transparent assessment by the Commission, taking into account the latest scientific evidence and internationally recognised sources. The classification shall be based primarily on the following assessment criteria: a) rate of deforestation and forest degradation; b) rate of expansion of agriculture land for relevant commodities; and c) production trends of relevant commodities and of relevant products."

the vicinity of farms. Of course, the EU definition is pending, so many respondents noted the upcoming definition, but remained unaware of any criteria that may be leveraged.

2. System-level Awareness of Drivers and Inhibitors of Deforestation

In line with some of the literature reviewed for this study, over half of the respondents noted low income and low prices as contributing factors to instances of deforestation among Fairtrade producers. They indicated that when the price of cocoa and coffee drops, farmers often feel compelled to expand into forest areas to increase their production and maintain revenue. Of note, expansion not only offers additional land on which to grow crops, but access to timber that can be sold for supplemental income as well. On the other hand, respondents indicated that when prices are "high", this can turn buyers away, limiting market access and farmer income. Indeed, finding the right balance between price and market access was a key challenge highlighted by many interviewees, who stated that this further impacted stakeholder capacity for conservation.

One respondent from the Latin American and Caribbean Network of Fairtrade Small Producers and Workers (in Spanish, Coordinadora Latinoamericana y del Caribe de Pequeños(as) Productores(as) y Trabajadores(as) de Comercio Justo or CLAC), described how governmental programmes promoting other higher-productivity crops for increased income can also incentivise farmers to clear forests in order to establish new agricultural lands. Lack of governmental regulation promoting conservation in producing countries was noted as a related factor that exacerbated such deforestation and land clearing. Other factors driving deforestation mentioned by interviewees included: climate change and land degradation (biophysical 'dispositions'), leading farmers to seek new, less degraded lands; and cultural or demographic factors (cultural 'dispositions'). One interviewee, for example, noted that age is a contributing factor in Latin America, as while older generations may be more inclined to employ agroforestry, younger farmers may choose to carve out additional agricultural land from nearby forests, given a lack of land inheritance or given inheritance of smaller, less profitable plots.

Despite these challenges, all of which aligned with the evidence from the desk review phase, respondents identified several practices, behaviours, and motivations of Fairtrade producers which are key to protecting or conserving forests. Participation in well-structured cooperatives with invested leadership and good governance, for instance, was mentioned by some respondents as a motivating factor for conservation and forest protection. Experience with shade production and agroforestry were also highlighted as inhibitors of deforestation, as producers see the positive effects of these methods and become more likely to maintain forest area. Additionally, awareness of the EUDR and perceptions related to how agroforestry can provide alternative sources of income were highlighted as key to curbing deforestation going forward. Still, attitudes were considered very region-specific, which made it difficult to assess the extent to which perception impacts deforestation-related outcomes in all instances. For instance, many interviewees noted that indigenous communities, women, and older generations are more likely to protect forests, though reasons for this vary by community,

⁶³ Relatedly, poor infrastructure and a lack of access to alternative energy sources were noted as additional drivers of deforestation, as farmers are often forced to use trees as firewood.

country, and political context. Once again, each of these mentioned factors were coherent with the literature.

3. Fairtrade's Impact on Deforestation and Related Challenges

Notably, all respondents expressed confidence on some level that being part of the Fairtrade system provided farmers with tools, knowledge, and resources to help them mitigate deforestation and/or protect forests. The Fairtrade Premium (FTP) was mentioned as a key element by a vast majority of respondents, especially as it is often used as an investment for environmental activities (however, one respondent noted this may be speculation, given a lack of data). The Fairtrade Minimum Price (FMP) and organic differential were also referenced as relevant by a few respondents. Fairtrade standards were additionally considered a powerful tool by a share of interviewees, though some warned against relying too much on standards, as farmers do not always have the capacity to act on them, especially Fairtrade's development standards. Relatedly, some interviewees suggested that no Fairtrade intervention can decrease deforestation rates on its own, a sentiment that aligned well with the literature. Similar to desk review findings, these respondents noted that a combination of interventions is required, including farm diversification, training programs on agroforestry and income diversification, and programs to support youth. Indeed, a majority of interviewees noted that Fairtrade training and capacity-building was a key element of deforestation prevention, with many also stating that Fairtrade's promotion of agroforestry was particularly crucial, as was the provision of resources such as free seedlings or support for alternative energy sources.

One respondent from the Fairtrade Network of Asia & Pacific Producers (NAPP), additionally stated that training on agricultural practices should be backed by data, which is not always readily available for SPOs. While Fairtrade is working on projects to increase data access and to better systematise data storage, analysis, and management, there is still a lot of work to be done. Data is a crucial element in the fight against deforestation, but ongoing data collection and sharing is continually challenged. Almost half of respondents stated that SPOs, while expected to collect and share required information, such as geolocation data, are not always equipped to carry out this effort, as they often have limited technical capacities and resources.⁶⁴

Equally relevant for respondents were issues related to data ownership and protection. According to an account manager at Fairtrade Germany, Fairtrade does not share data without consent, yet even gathering this consent comes with its own set of challenges. Questions around compensation for existing data remain, and concerns were raised that data collection costs would only increase if SPOs were required to collect more data or adopt new technologies. Relatedly, some respondents were also concerned about the challenges posed by the constant development of new digital tools for monitoring deforestation, as the everadapting digital world makes it hard to assess which tools are most suitable or cost-effective.

33

⁶⁴ Of note, should interventions to build technical capacity not be established, ongoing dependency on third-party support for geolocation-related data collection (and other types of data collection) may occur.

4. Claiming Correlation vs. Causation

While many interviewees found Fairtrade interventions to be useful in the fight against deforestation, several respondents stressed the difficulty of establishing a conclusive connection between holding a Fairtrade certification and engaging or not in deforestation. Relatedly, although respondents showed a high degree of certainty that Fairtrade had a positive influence on deforestation mitigation, they were less sure about the system's role in officially preventing deforestation. For example, while the cocoa and coffee standards, as well as Fairtrade training, awareness-raising campaigns, and other projects were mentioned by several interviewees as important activities that could help decrease deforestation, one respondent warned against establishing a cause-effect relationship between Fairtrade and the prevention of deforestation, as multiple schemes and projects may coincide with Fairtrade. Once again, this sentiment aligns with the literature.

Furthermore, while a majority of respondents believed that SPOs saw Fairtrade as a good ally for environmental initiatives, all interviewees expressed a certain degree of doubt as to whether that perception was widespread. Some stakeholders claimed that SPOs are beginning to see a stronger focus being placed on environmental issues at Fairtrade, and that they are increasingly using the FTP for environmental projects, but others were unsure of this reality, or noted that perception varies by SPO. One stakeholder from the Centre of Excellence Climate & Environment, for example, noted that Fairtrade was mostly perceived as a good partner in social interventions despite increased efforts to be more active in the environmental sphere. This respondent also concluded that, given the relative newness of the system's environmental focus, there was limited internal understanding of the extent of deforestation system-wide, and reduced technical capacity for deforestation monitoring, all of which has slowed progress towards curbing forest clearance. This sentiment was echoed by many others. One interviewee, for instance, noted that there was little research or internal knowledge about deforestation prevention among system stakeholders, while another indicated that although knowledge was growing, there had been protracted inaction on the part of Fairtrade regarding deforestation. This stakeholder criticised the system for only taking renewed action once official news about the EUDR surfaced.

Despite these concerns, a vast majority of respondents shared their belief that Fairtrade has an overarching role to play in combating deforestation going forward, as well as a role to play in environmental protection and action overall. They also believed that theoretically, Fairtrade interventions do help farmers to avoid deforestation, with one respondent even claiming that the higher the percentage of Fairtrade-certified sales an SPO had, the bigger their impact on preventing deforestation.

5. Need for More Resources and Support to SPOs

While Fairtrade is taking targeted action on deforestation, scale is costly. Indeed, half of all respondents identified that a lack of time and financial resources – for farmers, SPOs, PNs and the system as a whole – reduces the abilities of Fairtrade stakeholders to effectively combat deforestation or take other environmental action. Among other difficulties, respondents stated that farmers are facing limited capacity to collect Global Positioning System (GPS) points and polygons, and that the restricted visibility of data combined with the global scope of

deforestation makes it difficult for the Fairtrade system to tackle the issue in a timely fashion. Financial constraints also require teams to prioritise interventions and strategies based only on available resources. For this reason, some respondents shared that commercial partners are critical to carrying out interventions, and highlighted the relevance of partnering with buyers and traders on deforestation programmes and beyond.⁶⁵

When asked to respond to the most relevant use of resources, all but one respondent indicated that Fairtrade's biggest role in monitoring deforestation and ensuring environmental protection should be in supporting SPOs financially and otherwise. The type of support interviewees believed would be most useful included:

- Awareness-raising activities highlighting deforestation, related Fairtrade standards, the EUDR, and other regulations;
- Support for complying with standards and regulations, including financing for a variety
 of initiatives related to reforestation, geolocation, agroforestry, and risk analysis;
- Support for up-to-date geolocation-related data collection;
- Support for other data collection and information sharing, and partnering with various stakeholders for this purpose;
- Support for tackling the root causes of deforestation, such as poverty, by addressing low income through the FMP and organic differential (i.e. the economic benefits of the FMP are assumed by some Fairtrade stakeholders to limit the need for expansion);
- Provision of training opportunities and education related to reforestation and agroforestry;
- Advocating for SPOs and ensuring a bridge between farmers and consumers;
- Promoting farmer ownership of data and just compensation for data collection efforts.

Furthermore, stakeholders noted that it was important for Fairtrade standards to align with regulations, and for the system to promote ground-truthing efforts and mitigation processes, should alerts be received for specific farms. Of course, for any of the above supports to be successful, it is crucial that SPOs see the value in deforestation monitoring efforts, especially given the additional workload that such efforts require. For the majority of respondents, monetary incentives were the most relevant for SPOs, with many stakeholders noting that market access and higher prices were the best possible motivators for compliance. A few also believed that unlocking funds for deforestation-related activities would compel SPOs to increase their monitoring efforts.

Unfortunately, beyond maintaining market access, monetary incentives of the EUDR are few, and Fairtrade has limited resources to engage in deforestation-related projects. As a result, one respondent stated that monetary incentives should not be the sole focus, as ecological concerns were also present in SPOs' minds, especially the impact of deforestation on water access. In other words, this interviewee believed that by highlighting the relevance of combating deforestation and engaging in forest protection for ongoing production and community well-being, Fairtrade could incentivise action as well.

⁶⁵ As one example of support from a commercial partner, in 2020, Tony's Chocolonely had successfully <u>GPS-mapped</u> <u>all cocoa farms</u> in their partner cooperatives in Côte d'Ivoire and Ghana.

6. Setting and Achieving Targets Alongside External Stakeholders

When asked about the best approach to setting targets for curbing deforestation among Fairtrade-certified SPOs, a majority of respondents emphasised the need for Fairtrade to first gain a better understanding of the current situation. This included comprehending the drivers of deforestation, confirming the extent of deforestation in Fairtrade SPOs, identifying hotspots. and strategizing around how to scale successful initiatives with available funding. Given that much of this work is pending, only a few respondents provided insight into possible targets. Some proposed establishing a no-deforestation target within Fairtrade by a specific date, while others advocated for a zero-deforestation target, though it was unclear whether these terms were intended to be synonymous. 66 One interviewee explained that the cocoa standard could be used as an example to set targets, as it is the most comprehensive of all and encompasses details on prevention and mitigation.⁶⁷ Fairtrade Africa (FTA), meanwhile, indicated that the system should monitor key performance indicators (KPIs) as part of their broader efforts to curb deforestation, which could include measuring the number of SPOs conducting real-time deforestation monitoring; the number of farms mapped in each SPO; the number of SPOs that do not have member farms in classified forest areas; and the percentage of farmers that have some knowledge on deforestation-related issues, among others.

While setting targets is a clear priority for the Fairtrade system, albeit a difficult one, confirming the pathways to achieving these targets is another challenge. Respondents suggested that co-financing from commercial partners was essential, as was the provision of technical assistance and training, the promotion of reforestation and agroforestry, georeferencing, and continuing advocacy for producers. It was further noted that monitoring of targets would be difficult, and respondents were aware that merely conducting specific monitoring activities, such as georeferencing, was not enough, given that concerns around data ownership, quality, and accessibility would remain. Aligning on data requirements and formats was highlighted as relevant in this context, as was the incorporation of any KPIs into official Fairtrade strategy to ensure coherence, accountability, and proper guidance.

Finally, beyond the need for co-financing, interviewees also suggested that partnership with research organisations, local institutions, and technical service providers that have properly trained staff and staff with the relevant expertise would be particularly useful, as enhanced technologies are key to monitoring deforestation and related targets. Indeed, leveraging digital tools was identified by several interviewees as essential for achieving

⁶⁶ Zero deforestation refers to no clearing or conversion of forest areas at all, while zero net deforestation would allow for clearance so long as another "equal" area was reforested. No deforestation is not commonly used among international bodies, but may be synonymous with zero deforestation. Related to the issue of zero (or gross) deforestation versus zero net deforestation, questions also arose in interviews as to how Fairtrade and other cocoa and coffee sector actors would incentivise reforestation amidst a focus on EUDR compliance, given that the EUDR focuses on zero or gross deforestation and therefore does not incentivise reforestation or allow for remediation through reforestation, as does zero net deforestation.

⁶⁷ Reviewing the Fairtrade standards to ensure they better align with EUDR requirements was noted as an important mitigation strategy by a share of interviewees. In the past year, the Fairtrade system has indeed been taking action in this regard.

⁶⁸ Respondents from the Fairtrade Advocacy Office highlighted the potential relevance of advocating for other markets to align with EUDR requirements, as non-compliant cocoa and coffee producers who see themselves excluded from the EU market may seek opportunities elsewhere, which could lead to deforestation to grow other crops.

Fairtrade's global goals, with one respondent indicating that the provision of basic or low-tech tools would increase adoption.

7. The Role of Fairtrade Going Forward

According to several interviewees, Fairtrade is still working to determine its overarching role in curbing deforestation, further limiting progress. ⁶⁹ In addition, there was disagreement among many stakeholders about how active the system should be. Many interviewees believed that Fairtrade should support producer compliance with the EUDR, but some claimed that Fairtrade should take a stronger leadership role. According to almost half of respondents, this leadership demand is primarily coming from NFOs and other civil society organisations, who are expecting the system to provide more strategy, technical and financial support, and advocacy. Commercial partners, buyers, and retailers alike are also requesting more leadership from Fairtrade, and are asking for data sharing, transparency on Fairtrade's strategy, and even, in some cases, an all-encompassing solution. Most respondents agreed, however, that progress is slow and Fairtrade cannot be the only actor.

For now, at minimum, some respondents said that Fairtrade should improve internal communication between departments, as this could lead to a better understanding of the system's approach, as well as more timely action. One interviewee also stressed the need for system alignment on strategy and paths forward that are coherent with the Fairtrade mission and values, in order to avoid getting sidetracked or overextending resources. To this end, the Product Managers once again noted the ongoing importance of updating Fairtrade standards to ensure alignment with the EUDR, and some respondents called on Fairtrade to additionally support standards compliance when it comes to data collection and management. Another respondent expressed hope that the system would be able to hire specialised staff to support compliance and other goals, allowing Fairtrade to become more recognised as an environmental certification in addition to a social one.

Establishment of Program Theory

The system-level stakeholder interview findings were mapped against Fairtrade's ToC to demonstrate how the system's existing interventions may incentivise or de-incentivise deforestation and forest protection. The goal of doing so was to develop a hypothesis that could be tested in the next phase of the assignment, the field work phase. Of note, Fairtrade interventions are meant to work together, and at present, the system-wide ToC presents six different interventions that are led by and/or count on the participation of Fairtrade International, PNs, NFOs, and the Centres of Excellence, among others. These interventions are: 1) premium and sustainable pricing mechanisms; 2) standards and certification; 3) producer support and producer networks; 4) brand and market development; 5) data and intelligence; and 6) partnerships and advocacy. Table 6 below presents initial hypotheses about how each of these interventions incentivise or de-incentivise deforestation and forest protection. In some cases, however, there was insufficient evidence to formulate hypotheses.

⁶⁹ Importantly, Fairtrade has also made progress on their goals and offers in curbing deforestation since the interviews were conducted at the end of 2023.

Table 6. Potential impact of Fairtrade interventions on reduced deforestation and increased forest protection

protection	
Intervention	Hypothesis
Premium and sustainable pricing mechanisms	Under this intervention category, Fairtrade identifies five interconnected elements that are intended to drive system-wide change: the FMP, the FTP, the FTP Committee, Cost of Sustainable Production (COSP), and the Living Income Reference Price (LIRP). • FMP: The FMP comes into effect when market prices fall below this level. During the interview phase, stakeholders mentioned that the FMP could theoretically curb deforestation (both at its current rate or through increases), as deforestation is connected to poverty and the resulting inability of producers to invest in sustainable practice, given a low coffee or cocoa price. However, stakeholders also acknowledged that on its own, the FMP would not fully curb or reduce deforestation or lead to forest protection. Similarly, while the organic differential provides producers with additional income to maintain organic production, there is insufficient evidence to link this directly with zero or decreased deforestation. • FTP and FTP Committee: Interviewees suggested that the FTP can have a significant impact on deforestation outcomes if FTP Committees and/or SPOs choose to invest this sum into projects that combat deforestation or lead to reforestation, afforestation, and environmental conservation (this may include projects that train farmers in Good Agricultural Practices or GAPs). However, the extent to which the FTP is currently being applied for such purposes across the entire Fairtrade system is unclear. Of note, if the FTP leads to investment in projects that reduce production costs, this may decrease monetary pressure and therefore the drive to deforest for increased production purposes as well. Once again, evidence on this is limited, so the suggestion remains speculative. • COSP: See footnote 72 to understand why the Program Theory does not make hypotheses about COSP. • LIRP: There was little mention of LIRP throughout the interview phase, but participants understood that increased pricing for differentiated products is connected to deforestation avoid
Standards and certification	There are two elements connected to this intervention category in the Fairtrade ToC: standard requirements, and training. Fairtrade standards include core requirements that must be met by SPOs and buyers to obtain and maintain certification, and

⁷⁰ The FTP Committee is required for HLOs and recommended for SPOs, especially larger ones. It is composed of a group of elected and/or appointed individuals within an HLO and SPO, whose role is to decide on and/or oversee the spending of the FTP.

⁷¹ COSP was not listed as part of the Fairtrade ToC at the time of developing hypotheses for this assignment. Regardless, it is defined as the necessary production cost to farm sustainably and meet Fairtrade core requirements, especially environmental ones. The COSP is intended to be used in determining the FMP, such that the FMP is equal or greater than the COSP of any given product.

development requirements that can be adopted over time to increase sustainability. The system has increasingly been adding core requirements related to deforestation for SPOs (e.g. conservation of protected areas, protection of forests and vegetation, and processes/strategies to prevent deforestation) and buyers (e.g. the sharing of geolocation data, support to cooperatives in reducing deforestation risks, and related reporting). The most ambitious updates to date have been made to the Fairtrade Cocoa Standard, which requires compliance with Human Rights and Environmental Due Diligence (HREDD), deforestation avoidance, traceability and transparency, and more. A limited update to the Fairtrade Coffee Standard, meanwhile, was published in 2024 and includes requirements to prevent and monitor deforestation, protect forests, conduct geolocation and biodiversity management, and provide support to SPOs; it will be enforced in 2026.

- Standard Requirements: During the interview phase, participants noted that system-wide standards have been key to curbing deforestation in the past, even if this has not been their precise aim. For example, stakeholders mentioned that the standards have served to promote agroforestry, biodiversity, and environmental conservation. Interviewees also believed that going forward, standards would do even more to curb deforestation, as new additions are focused on compliance with the EUDR and other HREDD-related outcomes.
- Training: Fairtrade maintains various guidance documents to support SPOs and producers as they meet core standards and additional development standards. The documents include, among others, guides for HREDD, climate mitigation and adaptation, and more. Across the board, interviewees believed that training on standards and other elements was key to curbing deforestation, but warned against relying exclusively on standards given the cost of their application, especially the more ambitious development standards.

Producer support and producer networks

This intervention pathway includes four activities: training and programmes, women's leadership schools, climate academies, and programs and tailored projects. With the exception of the last activity, these activities focus primarily on field-level information sharing, with PNs serving as the project leads. As programmes such as these train SPOs and farmers in combating and/or mitigating deforestation and protecting forests, they may have a substantial impact on this topic.

- Training and programmes: PN-led projects, training, and other support (using either internally-generated or donor-provided funds) are seen as contributing to reduced deforestation and increased forest protection across the Fairtrade system. Both FTA and CLAC mentioned during the interview phase a number of initiatives they are leading which may have an impact on deforestation (e.g. youth and tree-planting initiatives). Interviewees also foresaw the need to continue training SPOs and producers on environmentally-focused standard updates and EUDR compliance, and believed this would be key to reducing deforestation risk, among others.
- Women's leadership schools and climate academies: While not exclusively
 mentioned during the interview phase, Fairtrade women's leadership
 schools and climate academies may serve to drive outcomes related to
 reduced deforestation, as they may teach sustainable practices that, once

- implemented, contribute to the curbing of deforestation or an increase in forest protection. Women are also seen as more likely to protect forests given their increased vulnerability to climate change and therefore increased need to act.
- Tailored projects: In addition to PN-led projects, Fairtrade also manages tailored projects and programmes to meet system-wide goals, such as those related to deforestation monitoring (e.g. the satellite-based pilots mentioned earlier in this report). Often, these are funded by allies and trade partners. Interviewees mentioned the importance of scaling these tailored projects in order to increase Fairtrade leadership and action on reduced deforestation.

Brand and market development

For this intervention pathway, Fairtrade has identified four connected elements: licensing, growth in emerging markets, public campaigns, and tailored solutions.

- <u>Licensing:</u> Fairtrade licensing allows brands and retailers to use the Fairtrade mark. While interviewees believed there was no evidence directly connecting a Fairtrade certification to reduced deforestation, sufficient correlation existed.
- Growth in emerging markets: This activity focuses on growing demand for products in producing countries. While there was no mention of the impact of increasing local markets for cocoa and coffee during the interview phase, some respondents worried that the EUDR would lead to more deforestation should farmers choose to begin planting crops with less scrutiny. For this reason, compliance support for cocoa and coffee producers was seen as critical.
- <u>Public campaigns:</u> These are communications led by Fairtrade to increase awareness of the system and its impact. Interviewees mentioned that Fairtrade's participation in collective action networks gives greater visibility to their efforts, and that ongoing public campaigns would support both internal and external stakeholders to understand the system's environmental impact alongside the social.
- Tailored solutions: This refers to support for buyers and trade partners (not SPOs or farmers, as distinct from the tailored solutions above) as they increase their sustainability mechanisms and related market growth. While there was little mention during interviews about how buyer/trader awareness or market growth could increase deforestation-related outcomes, the financial contribution of these partners for project work was seen as critical. Any solution that increases consumer interest in and therefore purchase of Fairtrade products would ostensibly create more value for Fairtrade companies, who could in turn invest their earnings in producers.

Data and intelligence

This intervention category includes two interlocking elements: producer-driven data systems and ownership, and integrated supply chain data systems. In other words, programs and services that support data and digitalization for decision-making among SPOs (i.e. support to SPOs in identifying their data needs and implementing data systems), and the integration of accessible systems that allow for data-sharing (i.e. dissemination of data, insights, reports, and more) among SPOs, buyers, and other relevant stakeholders.

- Producer-driven data systems and ownership: During the interviews, stakeholders noted that the system plays a key role in providing information on deforestation to a variety of actors, allowing them to maintain their business opportunities. Interviewees also referenced pilots which led to important data collection for forest monitoring, and said that such projects will be critically important going forward, as will partnerships with other entities like Satelligence.
- Integrated supply chain data systems: To share data throughout the Fairtrade system, use of digitalized internal management systems, such as Farmforce, FairTrace, FairInsight, and FairLens, are critical. Farmforce was introduced in West Africa in 2020 as a tool for SPOs to collect and manage traceability and geolocation data. The FairInsight platform, meanwhile, empowers system-wide actors to manage their data and information, such as the use of their FTP. Interviewees suggested that as SPOs and other actors in the Fairtrade system increase their capacity to interact with such platforms, they may be able to improve their competitiveness, productivity, income generation, and sustainability compliance, even as linked to deforestation. They can also share knowledge and encourage other actors to achieve positive outcomes in their own contexts.

Partnerships and advocacy

Under this pathway of intervention, Fairtrade references two elements: white papers/public position papers, and advocacy campaigns.

- White papers/public position papers: Fairtrade publishes documents about their position on important topics as well as statements intending to influence policy and legislation in favour of more equitable terms of trade. The extent to which these documents contribute to deforestation-related outcomes was not mentioned during the interview phase, but respondents did note the relevance of ensuring coherence among Fairtrade publications and internal actions.
- Advocacy campaigns: Fairtrade's advocacy work is conducted through communications and public partnerships, and their goal is to increase the involvement of SPOs and producers in these efforts. To address deforestation and biodiversity loss, for instance, Fairtrade advocated for responsible legislation and binding international treaties, and brought in the perspective of smallholder farmers. In negotiations on the EUDR, they drafted a paper highlighting the needs of cocoa and coffee smallholders and the need to go beyond top-down regulations that do nothing to change major market rules or unequal value distributions across value chains. The impact of these efforts was not mentioned during the interview phase, but respondents noted the importance of ongoing collaboration and work in this space.

Phase Three: Field Work

The field results must be interpreted by first understanding the context of each SPO participant, their social-embeddedness, and their dispositions. The qualitative analysis process attempted to interpret findings by accounting for each of these elements per SPO, and the role

of other variables (e.g. buyer and public sector influence, historical dynamics of land use, history of deforestation, economic state, etc.). Table 7 provides general information about each SPO, allowing for the summary of results that follows to be put into greater context. Figure 6 provides insight into the number of people who engaged in various stages of the field research.

Table 7. Overview of the SPOs and participants in interviews and focus group discussions

Country	SPO	Description
	Cooperativa de Caficultores de Aguadas (hereafter, Aguadas)	Aguadas comprises approximately 1,571 members located in Aguadas, in the department of Caldas. They produce washed Arabica coffee and are Fairtrade, RA, Starbucks Café Practices, and Nespresso AAA certified. Most of their members are over 50 years old, and average farm sizes are between 2-3 ha. They maintain periodic rotation of leadership.
Colombia	Anonymous	The non-Fairtrade SPO has approximately 600 members from communities in the Antioquia department and neighbouring Caldas. The cooperative began operations in 2018 as a response to the social programs supported by the Aurelio Llano Foundation. After some time, the organisation was formally registered and now produces coffee for the international market as well as locally (their roasted coffee is marketed under the brand Café con Historias). The average age of their membership is 45 years and farm sizes tend to be small farms (an average of 0.64 ha).
Coopérative Bassadougou de Diès (COOBADI)		COOBADI, located in Hermankono-Diès, Côte d'Ivoire was registered in 2007 and obtained Fairtrade certification in 2014. As of 2023, COOBADI had approximately 1,900 members, who grow cocoa on roughly 5,000 ha of land, producing a total of 4,000 MT annually. Key buyers and partners are Ben & Jerry's (buyer since 2015 and paying a LIRP since 2020), Barry Callebaut, Mondelez, Cargill, Unilever, and Tony's Chocolonely (hereafter, Tony's). Tony's added COOBADI as a supplier in 2022/23 and purchased 32% of its production (almost 1,000 MT) in 2023/24). ⁷²
Côte d'Ivoire	Société Coopérative avec Conseil d'Administrati on des Eco- Agriculteurs Modernes de Méagui (ECAMOM)	ECAMOM, located in Méagui, Côte d'Ivoire was registered in 2006, with an initial membership of around 300 individuals. As of 2023, ECAMOM had approximately 3,800 members, who grow cocoa on more than 18,000 ha, collectively. The cooperative has been certified Fairtrade since 2012; they also maintain RA certification. Key buyers and partners are Cargill, ECOM, Zamacom, Barry Callebaut and ALDI. ECAMOM's volumes sourced from members ranged between 7-10,000 MT annually (in the three seasons between 2019 and 2022). The organisation has also increased its share of Fairtrade cocoa sales in the 2019-2022 period, from 20% to 38%. The FTP received in 2021/2022 amounted to EUR 652.080,00.

_

⁷² Tony's Open Chain Impact Report 2022/2023. p.23. https://online.flippingbook.com/view/371809889/

	Anonymous	The non-Fairtrade SPO that participated in the research was established in 2018. As of December 2023, the cooperative had 179 members. One of its largest buyers is Cargill, and until 2020, the cooperative sold to ofi, who stopped purchasing due to the group's lack of certification (unclear which certification was required). The SPO also sells to certified cooperatives and individual buyers.
	COMISUYL - Cooperativa Mixta Subirana Yoro Limitada	COMISUYL comprises 120 members (22.5% women, 77.5% men) who are located in Subirana, Yoro, Honduras. The cooperative was legally incorporated in 1995 and is certified Organic and Fairtrade (certification processes were initiated in 2011-2012, which supposedly began to reverse damage to the environment through reforestation activities). Approximately 38.1% of their membership owns farms larger than 4 ha, while 61.9% owns smaller farms. Together, these members produce 150 MT of green coffee annually, of which 80% is organic.
Honduras	Café Orgánico Marcala, S.A. (COMSA)	COMSA comprises 680 members (27% women,73% are men) who are located in Marcala, La Paz, Honduras. The cooperative joined Fairtrade in 2001 and produces both conventional and organic coffee. Since 2005, COMSA has been working with different certifications, including Fairtrade, Organic, RA, and Designation of Origin. Approximately 61.8% of their membership owns farms larger than 4 ha, while 31.2% owns smaller farms. Member families typically comprise an average of five members each. Of note, Marcala is an area of interest for many organisations and projects that provide training and support to the coffee sector.
	Anonymous	The non-Fairtrade SPO is located in the Honduran department of Yoro. This cooperative left the Fairtrade system in 2022 due to what they perceived as limited benefits. Member communities are located in mountainous areas, where the economy revolves around coffee and there is a high presence of the Tolupan indigenous people. Farm sizes range from 0.5-4 manzanas (mz) ⁷³ for 70-80% of members. The maximum farm size is 20 mz (though, there are few instances of such farm sizes). Yields range between 18-25 quintals (one quintal is 100 kilograms) per mz.

 $[\]overline{}^{73}$ The land area that is a manzana ranges by country, but typically ranges between 1 ha and 2 acres.

Figure 6. Numbers of SPO leaders participating in interviews and members participating in focus group discussions and phone survey

Country	Fairtrade (FT) / non- Fairtrade	Name SPO	No. interviews with SPO	No. focus group discussions	No. participants in focus group discussions			No. participants in LQAS survey		
	(non-FT)		leaders	discussions	М	F	Т	M	F	Т
Colombia	FT	Aguadas (Cooperativa de Caficultores de Aguadas)	7	1	3	5	8	17	5	22
	non-FT	Anonymous	3	1	2	5	7	8	11	19
	FT	COOP-CA-ECAMOM (L'Entreprise Cooperative des Agriculteurs Moderne de Meagui)	3	1	9	0	9	18	1	19
Côte d'Ivoire	FT	COOBADI (Société Coopérative Bassadougou de Dies)	4	1	10	0	10	19	0	19
	non-FT	Anonymous	3	1	10	0	10	21	0	21
	FT	COMISUYL (Cooperativa Mixta Subirana Yoro Limitada)	4	1	6	1	7	13	8	21
Honduras	FT	COMSA (Café Orgánico Marcala S.A. de C.V.)	3	1	6	11	17	12	7	19
	non-FT	Anonymous	2	1	4	1	5	14	5	19
Total		8	29	8	50	24	74	122	37	159

Qualitative Research Findings

The qualitative interviews with SPO leaders and the focus group discussions with members led to several key perspectives on Fairtrade's role in de-incentivising (or curbing) deforestation and forest protection. While the tools (e.g. interview guides, focus group guides) used in this research attempted to confirm the veracity of the Program Theory, findings are organised into eight thematic categories (below), which emerged organically from the conversations. Information on how these findings relate to the Program Theory can be found in the conclusion. Of note, the findings from this section were validated through two validation workshops held with the Fairtrade SPOs. During these two-hour online workshops, the SPOs were presented with the findings and asked to confirm or provide additions to the key takeaways.

- 1. Ongoing Challenges in Farming Communities and the Link to Deforestation
- 2. Perception of Deforestation Risks, Rates, and Inhibitors
- 3. Awareness of and Concerns about EUDR Among SPO Leaders and Members
- 4. Digital Capacity, Progress, and Challenges
- 5. The Role of the Fairtrade's Pricing and Premium Regulations in Forest Conservation
- 6. Standards and Training on Standards Perceived as Relevant
- 7. Relevance of PN Support in Environmental Conservation
- 8. The Relevance of Non-Fairtrade Partnerships

1. Ongoing Challenges in Farming Communities and the Link to Deforestation

Interview and focus groups participants in Colombia, Côte d'Ivoire, and Honduras all recognized the impact of various socio-economic challenges on their ability to create sustainable livelihoods through cocoa and coffee farming. A common challenge reported in all three countries was difficulty in making ends meet. This aligned with the literature as well as with perceptions of Fairtrade stakeholders. In Colombia, for example, SPO leaders highlighted concerns over the volatility of coffee prices, and noted that low prices are forcing many people to abandon coffee farming altogether. Farmers also indicated that land division through inheritance leads to decreased farm sizes for many family members, and makes coffee farming less economically sustainable for communities overall. Low prices and small farm sizes were similarly noted as contributors to financial hardship and drivers of deforestation in Honduras, where SPO leaders and focus group participants connected the two contributors further, expressing that low prices limit land acquisition.

SPO leaders from Côte d'Ivoire, on the other hand, noted that it was an insufficient availability of productive land which exacerbated income and led to deforestation. They expressed that farmers are seeking more productive plots because of depletion on their existing plots, which they attributed to the swollen shoot virus and a lack of tree cover. As one example, ECAMOM reported a decrease in yields from 700 kg/ha in 2019-2020 to 450 kg/ha in 2021-2022. They blamed this decrease on pests and diseases and unfavourable weather conditions, though lower yield values can also be explained by an improvement in yield estimations per hectare. SPO leaders in Cote d'Ivoire gave examples of members who reported 3-4 ha, but after digital mapping were discovered to have 6-7 ha. Members of the non-Fairtrade Ivorian SPO, meanwhile, also reported lower yields, and highlighted that lower yields led to an inability to invest in sustainable cocoa farming. They said that their desire to plant more shade trees and engage in reforestation had been hindered by their inability to purchase saplings.

While low production rates were a shared challenge for SPO leaders and farmers in Latin America as well, only participants in Côte d'Ivoire attributed their decrease in yields to climate change. In Honduras, SPO leaders and focus group participants attributed lower yields to production under shade, and while, like participants from Côte d'Ivoire, they agreed that tree cover allows for a longer productive life of farms, they still perceived this a trade-off with lower production rates. Interestingly, migration was also noted as a contributor to lower yields in the Latin American context, with Honduran SPO leaders stating that the advanced age of coffee farmers and ongoing youth migration affected the sustainability of coffee production.

⁷⁴ The Colombian non-Fairtrade cooperative members mentioned that scholarships for youths offered by the Aurelio Llano Foundation to study agriculture-related subjects and the emphasis on eco-tourism is providing to the municipality more business opportunities, but they also expressed a lack of knowledge on how to fully leverage their environment to attract more tourism (such as bird watching activities and others). More about this Foundation is found later in the report.

⁷⁵ This happens even when SPOs have strong and effective goals and actions to address deforestation. Farmers will work on new plots, even fallow lands, due to the economic incentive to maximise cocoa production. This is occurring even though producers understand that there are not many forested areas left.

⁷⁶ https://cr.aldisouthgroup.com/en/download/aldi-and-ecamoms-fairtrade-partnership-second-impact-report p. 13.

2. Perception of Deforestation Risks, Rates, and Inhibitors

In the midst of these noted challenges, all of which align with the literature as well as with the perceptions of Fairtrade stakeholders, the overall findings from Colombia, Côte d'Ivoire and Honduras suggest that while progress is being made, deforestation remains a risk. It is furthermore clear that, aligned with a social-embeddedness framework, the differences in (and perceptions of) deforestation risks and rates vary, and are influenced by a mix of historical, economic, and institutional factors.

In Honduras, there was a general belief that deforestation rates have stabilised or even decreased due to farm renovation in the context of the coffee leaf rust and pine weevil crises. In Colombia, past encouragement by the Federación Nacional de Cafeteros (FNC) to plant sunresistant varieties was noted as a key historical driver of deforestation,⁷⁷ even if renewed awareness of the impacts of climate change is leading to calls for shade-grown coffee. Colombian SPO leaders and focus group participants also indicated that mining activities and avocado cultivation are posing significant deforestation risks in their communities, and threaten water sources as well.

Focus group participants from Côte d'Ivoire, meanwhile, shared that past deforestation caused by illegal commercial logging or by farmers using unsustainable agriculture practice has given way to a more conservation-minded approach among producers. There was the perception among respondents that, at least in the context of Fairtrade SPOs and farmers, risk of deforestation was low to medium. Nevertheless, goals to maximise cocoa production for immediate economic gain through forest clearing/expansion was still understood as a threat.⁷⁸

Regardless of risk perception, among interviewees and focus group participants (i.e. SPO leaders and farmer members) from both Fairtrade and non-Fairtrade SPOs in all three countries, there was a high level of awareness regarding the importance of combating deforestation risks through farm diversification, reforestation, and forest preservation. However, perceptions on the benefits of these activities varied widely between countries. In Colombia and Côte d'Ivoire, farm diversification⁷⁹ and reforestation were deemed crucial for both environmental sustainability and the long-term economic well-being of farming families, but in Honduras, the economic benefits of diversification were seen as minimal. According to SPO leaders from COMSA, while pests and disease outbreaks in Honduras did play a significant role in moving producers away from monoculture toward reforestation and farm diversification (via fruit trees, staple grain crops, livestock, poultry, and timber-yielding trees), it was noted that diversification primarily contributes to food security rather than to income increase. Additionally, SPO leaders from COMISUYL noted that small farm sizes and certain farm locations and elevations challenge capacity for successful diversification, especially if the

⁷⁷ IHCAFE in Honduras also promoted full-sun farming in the 1990s, as reported by COMSA leaders.

⁷⁸ Across SPO leaders and farmers, some accounts suggest that shifts in perception and mindsets about the need to protect forests have indeed occurred due to climate change and increased awareness of environmental protection. For example, in Honduras, Fairtrade cooperative members said that water scarcity in their communities was changing perceptions about the need to protect the environment. Nonetheless, economic motivations appear to outweigh conservation-related concerns.

⁷⁹ SPOs in Colombia particularly emphasised the importance of diversification in achieving higher income, as sole reliance on coffee is not sufficient due market volatility.

⁸⁰ Of note, non-Fairtrade SPO members claimed to be purchasing shade trees themselves as the cooperative is not providing them.

growth of new crops requires a certain amount of space or climate;⁸¹ meanwhile, leaders and members from the non-Fairtrade SPO in Honduras claimed that diversification negatively affects coffee yields. This sentiment is in line with the belief that coffee production under shade reduces yields.⁸²

3. Awareness of and Concerns about EUDR Among SPO Leaders and Members

Awareness of the EUDR as well as Fairtrade requirements as related to deforestation varied among field-level research participants. While SPO leaders and members in Honduras appeared to be well-informed, there was limited awareness in Colombia and Côte d'Ivoire. Members from the Fairtrade SPO in Colombia, for example, expressed a belief that either their cooperative or the FNC would take care of the EUDR's regulatory requirements on their behalf. Meanwhile, of all focus group participants in Côte d'Ivoire, only two mentioned mapping as a key part of the EUDR, and they furthermore believed that this was the only requirement of the law. In contrast, SPO leaders did discuss the need to map farms, and highlighted a need for support in doing so.

In contrast, in Honduras, leaders from all three SPOs claimed to be either fully or almost fully compliant with the new regulation, though expressed concerns regarding certain aspects of the law, specifically its lack of clarity surrounding costs and verification mechanisms, and the roles that diverse actors were expected to play across the coffee value chain. SPO leaders from COMSA and COMISUYL were also particularly concerned about the absence of an internal budget and external support to address the new requirements, with the latter cooperative noting challenges in disseminating information about the EUDR to members due to limited resources. Leaders and members from the non-Fairtrade Honduran SPO, meanwhile, identified georeferencing as their primary cost challenge, although anticipated that carbon payments could alleviate some budgetary restrictions; they are currently working on a project with the Instituto Hondureño del Café (IHCAFE) in this regard. Beyond implementation challenges, SPO leaders from all participating cooperatives in Honduras criticised the fact that the EUDR does not translate into higher prices for farmers or provide compensation for the additional effort required. SPO leaders furthermore expressed worry that the law would be a demotivator for some farmers, who might decide to switch to other crops or abandon farming altogether.

Interestingly, many SPO leaders and members across all three countries credited their knowledge of the EUDR and related Fairtrade standards to training from their PNs. ⁸⁴ Of course, this was only relevant for the Fairtrade SPOs, and except in the case of Honduras, awareness on the regulation was indeed higher among Fairtrade SPOs than non-Fairtrade SPOs. Beyond PNs, the following were listed as relevant actors who provided information to SPOs and farmers as related to the EUDR, and as related to deforestation and conservation more broadly: in Honduras, the Honduran Coordinator of Small-scale Producers (CHPP), IHCAFE, Asociación Hondureña de Productores de Café (AHPROCAFE), other certifiers, the Honduran Chamber of

⁸¹ COMISUYL is located in the central highlands of Honduras, with most farms at elevations ranging from 900 to 1,400 m.a.s.l.

⁸² SPO leaders in Honduras also noted that the advanced age of farmers and ongoing youth migration were threatening the future of coffee production.

⁸³ COMSA leaders also mentioned carbon projects as initiatives they would want Fairtrade to explore.

⁸⁴ In the case of Colombia, however, Fairtrade SPO members did not reference support from PNs.

Commerce, and European buyers; in Colombia, the FNC; and in Côte d'Ivoire, Barry Callebaut's processing subsidiary, Cargill, Solidaridad, Trace Africa, the internet, and national TV.⁸⁵

On a positive note, at least some SPO leaders saw the EUDR as an opportunity to advance protection of forests and natural resources, and to improve farming practices. Specifically, leaders from the non-Fairtrade SPO in Honduras mentioned the fact that IHCAFE is now promoting agroforestry as an important strategy, and may potentially support transition; this stands in stark contrast to IHCAFE's earlier promotion of full-sun farming.

4. Digital Capacity, Progress, and Challenges

Beyond disparities in awareness of the EUDR in general, a disparity in knowledge and experience surrounding the use of digital tools and the application of geolocation was observed in all three countries. The Honduran SPOs were by far the most advanced in this regard, with COMISUYL and COMSA reportedly having mapped 90% and 80% of farms respectively. COMISUYL in particular indicated having hired a technician for this purpose, and they are now using Dimitra to store farm data.⁸⁶ The mapping progress made by the non-Fairtrade cooperative was unclear, with one SPO leader stating that one-fourth of the farms had been mapped, and another claiming that georeferencing efforts had reached 90% of their farms.⁸⁷ Despite the numbers reported by SPO leaders, only COMISUYL members discussed georeferencing efforts during their focus group session.⁸⁸

In Colombia, some awareness of geolocation was shown by both SPOs, as they – rightfully or wrongfully – placed trust in the FNC and their own cooperatives that data collection would be conducted for compliance purposes. In the case of Aguadas, SPO leaders indicated that the FNC has already begun mapping some farms, but it is unclear how many farms have been mapped to date. In addition, Asómbrate⁸⁹ and Nespresso were noted as having supported mapping efforts, but SPO leaders from Aguadas were unable to share additional information in this regard. Overall, there seemed to be a lack of interest in exploring the topic further.

In the case of the non-Fairtrade SPO in Colombia, leaders showed a basic engagement with digital mapping thanks to the support of the Aurelio Llano Foundation, with some farms georeferenced, but not all. However, levels of familiarity about the EUDR and the upcoming need for digital monitoring among members were low. Indeed, despite a small mention of concerns about the limitations of satellite imagery (e.g. some leaders noted that increased cloud cover reduces the accuracy of satellite imagery), there appears to be a significant need for further education and support to fully leverage these technologies. ⁹⁰

⁸⁵ Relatedly, Ivorian SPO leaders highlighted the relevance of policy information dissemination for environmental conservation, including information related to national legislation. Coherent follow-up action was also identified as critical, however, as there were reports from the non-Fairtrade-SPO that state-wide inaction on policy and collusion by water and forestry agents led to deforestation.

⁸⁶ COMSA staff did not share any details about the platform or system currently being used to map farms.

⁸⁷ The higher rate was attributed to the cooperative's certification processes.

⁸⁸ This does not necessarily indicate that farms were not mapped or that farmers lacked awareness that their farms were mapped and why, though this could be a topic for further exploration.

⁸⁹ Asómbrate is a carbon-credit project led by Solidaridad and Acorn/Rabobank.

⁹⁰ This is especially the case as satellite imagery can improve when radar is also used in addition to optical instruments, but awareness on this is limited.

In Côte d'Ivoire, only COOBADI reported to have mapped all farms between 2022 and 2023, using the FTP to cover part of the costs, and they had a high degree of certainty that EUDR compliance would not be a challenge. ECAMOM and the non-Fairtrade SPO suggested that mapping was a work in progress, however, and expressed urgent need for support. Regardless of progress to date, all Ivorian SPOs shared that mapping was or would be led by buyers, though perceptions as to who was financially responsible varied. COOBADI leaders said they as the cooperative paid for the GPS devices, though it was unclear how much support they receive from buyers and how much finance derives from their own investments. ECAMOM, meanwhile, uses at present 32 of its own field officers for collecting geolocation and polygon data, and mentioned that ALDI would begin to support them with geolocation in February 2024; the breakdown in financing for the initiative was unclear in their case, too. At the non-Fairtrade SPO, buyers were reportedly actively mapping farms at the time of the interviews, with resources of unknown origin.

An analysis of the responses provided by SPO leaders and members in all three countries does not allow for the establishment of a clear connection between Fairtrade affiliation and awareness of digital monitoring tools. In Honduras, SPO leaders shared that their no-deforestation compliance was due to alignment with certification standards, Fairtrade or otherwise. Staff from COMSA and COMISUYL stated that Fairtrade's requirements were comprehensive enough to ensure or support compliance, and they reinforced their own cooperatives' missions and efforts in environmental conservation. While the results from Honduras alone might suggest a link between Fairtrade and increased digital capacity, in Colombia, most Fairtrade producers seemed unaware of the meaning of GPS, even if leaders from the Fairtrade SPO claimed that farms had been mapped. Similarly, in Côte d'Ivoire, there was limited mention of digital tools from both SPO leaders and producers beyond a few references to GPS devices.

These gaps demonstrate that there remains an ongoing need for Fairtrade (and others) to further support cooperatives by facilitating training and access to digital tools and monitoring technologies. Enhancing SPO capacity to collect and leverage their own data is also key. Furthermore, even in the case of Honduras, the SPOs highlighted several challenges to increasing their digital maturity. For COMISUYL and COMSA, the challenges were mostly financial, with the former stating that the cost of technology hindered their ability to map all farms in a timely fashion. Interestingly, there was no mention among any Honduran SPOs of having received external support for georeferencing, though COMISUYL did share their desire for additional support from Fairtrade, particularly an internal system that would demonstrate EUDR compliance to buyers. Finally, SPO leaders from COMISUYL expressed concern about

⁹¹ The reason for this was the certainty that Tony's and Barry Callebaut are asking for polygon data, and they remind the SPO leaders often about the importance of EUDR compliance, and generally offer the support needed.

⁹² ECAMOM is reported to have collected geolocation data points – not polygons – of 100% of its members (close to 4,000 plots as of 2022). Like COOBADI, they are part of Fairtrade's digitisation project, using Farmforce to establish their digital Internal Management Systems.

⁹³ Both SPOs also lamented a lack of economic and human resources available (or financial resources to employ human resources) for implementing reforestation projects. Lack of support against illegal logging was a large concern among the non-Fairtrade producers as well.

⁹⁴ COOBADI's leaders mentioned during the validation workshop that they collect data for their buyers, who do the analysis and share back the results. In contrast, ECAMOM collects and analyses data itself, mitigating (i.e. solving) deforestation alerts, thus preventing their transmission further down the supply chain.

limited access to smartphones among older farmers,⁹⁵ while COMSA leaders noted limited connectivity and difficulties accessing some member farms, especially during the rainy season. While these final concerns are not under the control of Fairtrade, the system could support with training on mitigation techniques.

5. The Role of the Fairtrade's Pricing and Premium Regulations in Forest Conservation

Across all three countries, the FTP was consistently recognized for its economic benefits and potential to promote environmental conservation. For example, SPO leaders and members in Honduras reported utilising a portion of their FTP for reforestation initiatives, ⁹⁶ while in Colombia, SPO leaders reported using the FTP for a number of environmental projects, including those focused on reforestation and water and waste management. In Côte d'Ivoire, the FTP was considered essential not only for environmental projects, but also for general support during times of greater financial stress. ECAMOM members who participated in the focus group discussions highlighted the link between the FTP and their farm development plans, noting that the FTP is used for maintenance of fields, tree planting to fight against deforestation, and new cocoa tree purchase. ⁹⁷ For the 2022-2023 season, this SPO planned to invest 20% of their FTP into the construction of an agricultural training centre, focused on topics such as climate change, sustainable development, crop defence, agricultural economics, and livestock and plant production. ⁹⁸

Of note, SPO leaders and members from COOBADI believed that such "bonus" payments, like the FTP and the living income premium paid by Ben & Jerry's (and by Tony's since 2023/2024)⁹⁹, combined with training, are the most relevant supports in the fight against deforestation. Respondents in Colombia and Honduras agreed that the FTP was one of Fairtrade's most successful interventions, with Honduran SPO leaders and members also noting the relevance of Fairtrade's other pricing regulations. However, though these interventions are seen as impactful, leaders and members of Fairtrade SPOs in Honduras also stated that income from farming was still too low to guarantee covered costs of production, the maintenance of a decent standard of living, and environmental protection. Furthermore, participants from all three Honduran SPOs mentioned a decrease in Fairtrade's market share in the last few years, and there was also a general perception among both Honduran and Colombian SPO leaders and members that real income has decreased over the last few years due to rising costs of living. Farmers in Côte d'Ivoire further identified the challenge of high costs of living, though they believed that overall, their socio-economic situation has improved in comparison to past years.

⁹⁵ While this does not have a direct impact on the SPO's georeferencing activities – given that technicians are responsible for farm mapping – it does indicate a lack of data sharing and analysis capacity among farmers.

⁹⁶ COMISUYL reported using 3% of the FTP for this purpose.

⁹⁷ SPO leaders also expressed that the FTP is a source of motivation to comply with standards and requirements.

⁹⁸ https://cr.aldisouthgroup.com/en/download/aldi-and-ecamoms-fairtrade-partnership-second-impact-report

⁹⁹ Although not mentioned by the SPO, Tony's company's impact report provides evidence that the LIRP was paid for all cocoa bought from COOBADI (i.e. 32% of the SPO's total production for the 2023/24 harvest). Source from: Tony's Open Chain Impact Report 2022/2023. p.26. https://online.flippingbook.com/view/371809889/

¹⁰⁰ The non-Fairtrade cooperative held a Fairtrade certification until 2022, but decided to exit the system due to "limited benefits." COMISUYL, meanwhile, reported having received no offers from Fairtrade partners this year.

6. Standards and Training on Standards Perceived as Relevant

Beyond the importance of the pricing and premium regulations, across the board, Fairtrade standards and capacity building for standards were highlighted as relevant for SPOs and their members. In Honduras, Fairtrade SPO leaders and focus group participants noted that alignment with EUDR requirements was easier due to existing compliance with Fairtrade standards, though indicated that additional resources and training were needed, as well as increased collaboration with other coffee stakeholders. The Fairtrade SPO leaders in Colombia demonstrated limited awareness of standards, though this may be attributed to the disconnect between these requirements and their specific responsibilities at the SPO.¹⁰¹ Nevertheless, one interviewee conveyed satisfaction with the supportive role of standards in enhancing agricultural practices.¹⁰²

In Côte d'Ivoire, meanwhile, ECAMOM members showed high awareness of the new Fairtrade standards in regard to protecting forests, and noted that they are now involved in agroforestry through shade tree planting. They also stated that they no longer engage in excessive hunting and instead actively protect forests, rivers, and fauna – thanks in part to being trained in the EUDR and recognizing that meeting certain requirements would support their market access. Interestingly, members of the non-Fairtrade SPO in Côte d'Ivoire described seeking advice from certified farmers in their area; they have inquired about the consequences of deforestation, Fairtrade standards, and suggested interventions used to reduce risks. This is evidence of positive spillover effects, observed also in other literature on Fairtrade's impact (Dragusanu et.al., 2022). However, as some COOBADI members interpreted Fairtrade standards on deforestation themselves somewhat incorrectly as laws governing their actions in the fight against deforestation, the spreading of some misinformation (albeit minimal) may be present when farmers are sharing Fairtrade-related information with others.

While many research participants did perceive standards as a useful intervention in the fight against deforestation, insights from Côte d'Ivoire and Honduras also reveal that participants understand the connection between standards and income. Ivorian SPO members, for example, considered certification to be a precondition for being involved in various programs and projects as well as for market access. ¹⁰³ In Honduras, meanwhile, standards and certifications were seen as important drivers of income for farmers, as they lead to improved coffee quality and environmental protection, both of which can, according to COMSA leaders, lead to higher prices. The non-Fairtrade SPO leaders in Honduras furthermore indicated the relevance of ensuring that producers understand the importance of standards and their expected outcomes, as this leads to increased rates of adoption.

Finally, members of all SPOs agreed with this but pointed to the need for better incentives to compensate for their efforts toward increased environmental protection.

¹⁰¹ Some interviewees also showed disagreement with the audit process, and advocated for a more conversational and collaborative approach, rather than a stressful procedure focused solely on identifying negative aspects. The relevance of this comment is questionable, however, if interviewees were uninformed about standards.

¹⁰² The cost of certification was additionally noted as discouraging to forest clearing. In other words, if investments had already been made in certification, there was a disincentive to take action to lose certification.

¹⁰³ Further, being a member of a cooperative is a precondition of Fairtrade certification for cocoa and coffee, which is why some literature assigns effects of certification to cooperative membership more broadly (Mitiku, et.al., 2017).

COMISUYL members expressed frustration at the lack of market access guarantees despite the extra work that compliance with Fairtrade and other standards requires.

7. Relevance of PN Support in Environmental Conservation

Training and capacity-building programmes – whether offered by public, private, or certifying entities – emerged as universally impactful interventions for all SPOs. Specifically, programmes focusing on good agricultural practices and biodiversity were highlighted, as were reforestation-related programmes. In Colombia, the Fairtrade SPO spoke about projects related to nursery management and water source protection; involvement in watershed projects was also mentioned by the non-Fairtrade SPO.¹⁰⁴ In Côte d'Ivoire, there was additional prioritisation of plot renewal/rejuvenation, and shade tree planting (support derived from both private sector actors and FTA).¹⁰⁵

In Côte d'Ivoire, SPO leaders expressed a high degree of satisfaction with Fairtrade's engagement through FTA, not only as related to EUDR socialisation but to training as well. ECAMOM members in particular noted that the fight against deforestation in their region was initiated by FTA, and said they are currently involved in adopting agroforestry and other practices thanks to the training they received from their PN. Indeed, COOBADI leaders noted that with the data and information they received during training sessions, they launched awareness campaigns in producing communities, which they believe has had a positive impact on behaviour. This was corroborated by farmer members, who, during focus group discussions, noted the relevance of training for increased awareness and the importance of home visits by field technicians.

In Colombia, SPO leaders also highlighted the relevance of training and project implementation support that was provided by Fairtrade, and CLAC in particular. However, they expressed desire for even more in-depth support for EUDR compliance. When asked about areas for improvement, many leaders also highlighted the desire for enhanced assistance with project execution. This sentiment was echoed among Honduran SPO leaders, who suggested that Fairtrade enlarge its scope of action by i) facilitating more collaborations with other supply chain actors, ii) providing more training and awareness-raising to SPOs, and iii) improving market access and market prices.

When asked about what additional support is needed to effectively tackle deforestation, ECAMOM leaders referenced the relevance of more agroforestry and reforestation training as well as the provision of certain inputs, such as shade trades. ECAMOM's leaders also highlighted the importance of sharing the link between agroforestry and cocoa quality. Having piloted agroforestry on some producers' plots, this SPO took other members to taste the agroforestry cocoa, which was perceived as better tasting and of higher quality; this reportedly motivated more members to adopt agroforestry practices.

8. The Relevance of Non-Fairtrade Partnerships

¹⁰⁴ Gender-related programmes were also noted as relevant by the Latin American SPOs.

¹⁰⁵ Large buyers tend to implement activities related to CFI 2.0., and farmers receive many multi-purpose tree seedlings to transition to or improve agroforestry systems.

While it is clear that Fairtrade has an impact on deforestation-related and other outcomes in Fairtrade SPOs, all former and current Fairtrade SPOs reported extensive partner networks. Fairtrade-certified producers in Côte d'Ivoire noted having received extensive support from buyers as well as the Belgian Development Agency. Both ECAMOM and COOBADI are part of Barry Callebaut's Cocoa Horizons project as well as Mondelez's Cocoa Life with Cargill, among others. Some of these programs address productivity increase (via enhanced pruning, Farm Business Plans, and individual coaching) and diversification, while others are more closely linked with avoiding deforestation. ECAMOM's leaders also mentioned taking part in the programmes of Zamacom, RA, L'Agence Nationale d'Appui au Développement Rural (the National Rural Development Support Agency or ANADER)¹⁰⁶ and Conseil Café Cacao (Coffee and Cacao Council) – which recently provided shade-tree seedlings – while farmer members mentioned Solidaridad, Mars, and Nestlé, each of which has supported conservation efforts. 107 COOBADI, meanwhile, has worked on programmes with Barry Callebaut and Ben & Jerry's through which they received 'productivity packages' and shade tree saplings. Since 2022, COOBADI joined Tony's Open Chain, which means that they take part in its Open Chain approach based on five principles: traceable beans, a higher price, strong farmers, long-term relationships, and continuous productivity and quality improvements. 108

In Honduras, IHCAFE and AHPROCAFE were noted to provide a range of services to SPOs and producers, including, among others, technical assistance and advisory services; support with establishing tree nurseries; and awareness-raising on important topics. In addition, IHCAFE and the Fondo Cafetero Nacional were mentioned by COMSA leaders as providing infrastructure maintenance services, which are particularly important to them given the remote location of many of their farmers. Technoserve, the National Institute for Forest Conservation and Development, the Municipal Environmental Unit, the Agriculture and Livestock Secretariat's new Coffee Office, ACDI/VOCA, the United States Agency for International Development, and Heifer¹⁰⁹ were also listed as relevant partners by cooperative leaders, in most cases influencing agricultural practices. Root Capital and the National Bank for Agricultural Development in Honduras, both credit providers, were additionally mentioned, as were other certifiers, including RA, Denomination of Origin, Organic, and Bird Friendly; of note, these certifiers were only mentioned by the Fairtrade SPOs.

In Colombia, Fairtrade SPO leaders listed multiple buyers and partner organisations as well, each supporting different projects and initiatives ranging from gender equity to the promotion of shade-grown coffee and carbon payments. In particular, Aguadas mentioned Starbucks, RA, and Solidaridad, and noted the strong presence of the FNC in the area. Specifically, Aguadas accessed support with nursery management from Starbucks through its

¹⁰⁶ ANADER was also mentioned by the non-Fairtrade SPO as their main support, yet interviewees expressed frustration at the lack of continuous engagement.

¹⁰⁷ Focus group participants also mentioned the International Cocoa Initiative (on child and forced labour), GIZ, Impactum, and CCF, though did not follow-up with acronyms as relevant or on the focus of these interventions.

¹⁰⁸ https://www.tonysopenchain.com/resources/uploads/2023/04/21-22 Tonys-Open-Chain-report-v4.pdf

¹⁰⁹ Through its Chocolate4All project (2019-22), Heifer has promoted cocoa growing in the Olancho Department as a way to combat food insecurity. Although it is unclear whether participation was extended to COMISUYL – which is located in the neighbouring Yoro Department – SPO leaders shared that the organisation has supported them by providing cocoa trees.

 $^{^{110}}$ Agronomists and extension service providers from the FNC visit the SPO and its producers to support with best practices and other matters.

affiliation to Fairtrade, while Solidaridad included Aguadas in its project promoting shadegrown coffee. The non-Fairtrade SPO in Colombia, meanwhile, referenced Fundación Aurelio Llano and its support related to reforesting streams and rivers, and enhancing water collection and management.

Interestingly, only one interviewee in Honduras – a technician from COMISUYL – identified Fairtrade/CLAC as their main partner in sustainability through its training and capacity-building programmes; all other SPO leaders from Honduras listed various other partners, such as IHCAFE, AHPROCAFE, and Heifer, among others, as more influential.¹¹¹ Despite this claim, across the board and in all three countries, the Fairtrade SPOs were much more connected to outside initiatives than their non-Fairtrade counterparts. Indeed, only one non-Fairtrade SPO, the one in Honduras that formerly was Fairtrade until 2022, was the only SPO outside the system to have multiple sustainability partners. Its leaders claimed to have partnerships with 21 national organisations in addition to multiple international alliances, and they stated that these partnerships had been particularly helpful in terms of capacity building for farm management, quality training for youth, and project-based and market access support. This stands in stark contrast to the non-Fairtrade SPOs in Colombia and Côte d'Ivoire, which mentioned one partner each, the Aureliano Llano Foundation¹¹² and ADANER, respectively.

Meanwhile, the Farm Services programme of Barry Callebaut (part of the Living Income Accelerator) – the aim of which is to ensure that farming communities are more resilient to the challenges of poverty, child labour, and climate change – is a partnership between this buyer, FTA, Ben and Jerry's, COOBADI, and COOPAZA.¹¹³ Similarly, in the past couple of years, ECAMOM has been collaborating with ALDI SOUTH GROUP, FTA, and Fairtrade Germany to ensure sustained access to the Fairtrade-cocoa market in ALDI's product range. In 2022, partly as a result of this collaboration, ECAMOM leaders noted that they made plans to i) start an agroforestry project in order to achieve increased productivity and enhanced resilience to climate change in the long-term, and ii) reforest areas which had been deforested in the past for agricultural or mining purposes. These examples demonstrate the relevance of Fairtrade in launching multi-stakeholder partnerships, while other evidence from this section correlates Fairtrade membership to increased connectivity.

Regardless, while all SPOs expressed a certain degree of satisfaction with public and private partners, leaders and members from two SPOs in Honduras and one in Côte d'Ivoire noted that resources are typically limited, and that the support can be partial and occasional. Meanwhile, in Colombia, SPO leaders noted a lack of projects currently taking place, while Fairtrade farmers indicated that they are tackling environmental initiatives independently, using their own resources. Indeed, while the vast majority of field-level research participants referenced the importance of continued investment in environmental programs from the public, private, and civil society sectors, SPO leaders in Colombia and Honduras also highlighted the relevance of farming communities' commitments to environmental conservation. This demonstrates that beyond project-based work, local engagement and actions plays an important role in both reducing deforestation and promoting sustainable farming practices.

¹¹¹ However, they noted the relevance of PNs in EUDR socialisation.

¹¹² Two interviewees in Colombia briefly mentioned general support from Organización Multisectorial Campesinos Emprendedores based in Tamesis, the local municipality, and the Italian-Latin American Institute, but the content of these programs was unclear as were their benefits, if any.

¹¹³ https://www.fairtrade.org.uk/wp-content/uploads/2024/04/BC-Labour-brigades-evaluation-TOR-final.pdf

Quantitative Research Findings

The quantitative survey process, conducted with a random sample of farmers from each SPO that participated in the qualitative research process, sought to test the knowledge, perceptions, and practices of SPO members and to validate the results of the qualitative analysis. Questions gauged SPO members' knowledge of and engagement in SPO activities; adoption of agricultural practices; and perceptions of agroforestry, deforestation, and conservation. In addition, the LQAS survey included multiple-choice questions about the perceived advantages and disadvantages of agroforestry and forest conservation. While these multiple-choice questions, as distinct from the other binary questions, do not allow for statistical inference, they deepen the understanding of farmers' perceptions. In this section, we present the results of the LQAS analysis, the perceived advantages of agroforestry and forest conservation, and the (self-reported) agricultural practices implemented. Information that cannot be considered statistically significant is noted as such.

In alignment with LQAS model terminology, the below tables use the term "non-compliance" to demonstrate rejection of the null hypothesis (H0). As the H0 assumes negative results, "compliance" with the H0 indicates the veracity of those negative results (e.g. when asked, "Do the advantages of agroforestry outweigh the disadvantages?" the H0 assumes that respondents believe advantages <u>do not</u> outweigh disadvantages). If the number of respondents who answer positively, however, reaches the required threshold for statistical significance, the null hypothesis can be rejected. While the term "compliance" is often used throughout this report to reference regulations like the EUDR, in this section, the term is leveraged to ensure proper alignment with the quantitative methods/terminologies used for the study.

Coherence with Qualitative Results

Table 8. Results from quantitative research that align with themes from qualitative findings

Question	Quantitative Results	Interpretation Against Qualitative Results
Opinion on	For Colombia and	Relates to section: Perception of Deforestation Risks,
deforestation	Honduras, we can reject	Rates, and Inhibitors
and forest	the H0 of non-compliance	
degradation	and, therefore, state with	In the case of Côte d'Ivoire, deforestation was seen
being a problem	statistical significance	as a risk among survey respondents, which is
in your	that they do not see	contrary to the perception of low risk noted in the
community. (Y/N)	deforestation and forest	qualitative research. In the case of Colombia, the
	degradation as being a	quantitative results also differ from qualitative
	problem in their	findings, as survey respondents did not perceive
	community. In Ivory	much of a risk whereas focus group participants did.
	Coast, all SPOs identified	For Honduras, quantitative results do not indicate
	deforestation as a	perception of deforestation risk, which is aligned with
	problem.	the qualitative findings. While it is not clear why the
		quantitative and qualitative findings were misaligned
		in some cases, it is possible that context or
		awareness differed among survey respondents and
		focus group participants.

1		
Do the	For all SPOs, we can	Relates to section: Perception of Deforestation Risks,
advantages of	reject the H0 of non-	Rates, and Inhibitors
agroforestry	compliance and,	
outweigh the	therefore, state with	More qualitative information about this question is
disadvantages	statistical significance	found in the section below. It is interesting to note
for you? (Y/N)	that SPOs see the	here (and in the section below) that though
	advantages of	perceptions varied, the strongest mention of
See below for more	agroforestry as	disadvantages were found in Honduras, where
information on	outweighing the	members during the qualitative field work also
perception of	disadvantages.	questioned the advantages of diversification.
advantages	alsaavantages.	questioned the advantages of diversification.
Awareness of	Only for the non-	Relates to sections: Perception of Deforestation Risks,
which areas in	Fairtrade SPOs in	,
		Rates, and Inhibitors; and Awareness of and Concerns
the landscape	Honduras and Côte	about EUDR Among SPO Leaders and Members
have been	d'Ivoire, we can reject the	
identified by the	H0 of non-compliance	The findings from this survey question relate to
SPO as protected	and state that they are	awareness, which appears limited or diverse in both
areas? (Y/N)	reporting to be aware of	the qualitative and quantitative findings. It is possible
	which areas have been	that surveyed producers were not aware of the
	identified by the SPO as	meaning of protected area, or, the interpretation of
	protected areas.	protected area may be different across SPOs.
		Alternatively, there may be no protected areas in the
		regions near surveyed producers, impacting
		producers' "need to know."
Examples of	Only for Aguadas , we	Relates to section: Awareness of and Concerns about
deforestation	can reject the H0 of non-	EUDR Among SPO Leaders and Members
monitoring	compliance and state	
practices by the	that producers are aware	This was expected, since across the board, SPOs
SPO	of deforestation	seem to be lacking sufficient and ongoing
	monitoring practices	deforestation monitoring practices, even if farm
	being implemented by	mapping was conducted by their own staff or by
	the SPO.	buyer and partner field officers. Aguadas is an outlier
		in the quantitative research, however, as it would
		appear from the qualitative results that they too are
		lacking robust deforestation monitoring practices.
CDS manning of	Only for Aguadas,	
GPS mapping of	1	Relates to section: Digital Capacity, Progress, and
producers' plots	COMSA, ECAMOM and	Challenges
	COOBADI, we can reject	These was the are mostly aligned with recults from
	the H0 of non-compliance	These results are mostly aligned with results from
	and state that producers'	the qualitative data. However, it is striking that
	plots have been mapped.	COMISUYL does not reject the H0 according to the
	In comparison, neither	survey results, as the qualitative data would suggest
	COMISUYL nor any of the	otherwise. It is possible that the producers surveyed
	control SPOs reach the	for the quantitative fieldwork were the ones that are
	80% compliance	still in the process of getting their plots mapped.
	threshold.	
Agroforestry	For Aguadas, ECAMOM	Relates to sections: Relevance of PN Support in
training (having	and COOBADI, we can	Environmental Conservation, and The Relevance of Non-
received training	reject the H0 of non-	Fairtrade Partnerships

from SPO officers and/or agronomists) (Y/N)	compliance and state that they have all received at least one agroforestry training in the past year. For Honduran SPOs and the two control groups in Colombia and Côte d'Ivoire, there is no compliance.	In the case of Colombia and Côte d'Ivoire, we could assume that the Fairtrade affiliation helps Fairtrade SPOs have more access to agroforestry training compared to non-Fairtrade SPOs. In the case of Honduras, the quantitative results seem not to demonstrate statistical access to training for all SPOs, which does not allow for a clear link to the advantages of a Fairtrade affiliation (in contrast to Colombia and Côte d'Ivoire). These results for Honduras are incoherent with the qualitative results, which do demonstrate a lot of activity and training taking place in Honduras.
GAP training received	For Aguadas, ECAMOM and COOBADI, we can reject the H0 of noncompliance and state that they have all received at least one GAP training in the past year. For Honduran SPOs and the two control groups in Colombia and Côte d'Ivoire, there is no compliance.	Relates to sections: Relevance of PN Support in Environmental Conservation, and The Relevance of Non-Fairtrade Partnerships In the case of Colombia and Côte d'Ivoire, we could assume that the Fairtrade affiliation helps Fairtrade SPOs have more access to GAP training compared to non-Fairtrade SPOs. In the case of Honduras, the quantitative results seem not to demonstrate statistical access to training for all SPOs, which does not allow for a clear link to the advantages of a Fairtrade affiliation (in contrast to Colombia and Côte d'Ivoire). These results from Honduras are incoherent with the qualitative results, which do demonstrate a lot of activity and training taking place in Honduras.
Having received any saplings for shade trees or agroforestry from your SPOs.	Only for ECAMOM and COOBADI we can reject the H0 of non-compliance and state that they have received saplings from their SPOs.	Relates to sections: Relevance of PN Support in Environmental Conservation, and The Relevance of Non-Fairtrade Partnerships This is aligned with the qualitative results mentioning a strong intervention from buying partners and non-governmental organisations supporting both Fairtrade SPOs in Côte d'Ivoire with these interventions.
Extra investment in training and meetings (e.g. general assembly)	For all SPOs in Colombia and Côte d'Ivoire, we can reject the H0 of noncompliance and, therefore, state that they provide statistical significance of participating in additional training and meetings in the past year. In the case	Relates to sections: Relevance of PN Support in Environmental Conservation, and The Relevance of Non-Fairtrade Partnerships These findings demonstrate that producers in Colombia and Côte d'Ivoire are participating in training and meetings (aligned with the qualitative findings). That for all SPOs in Honduras, we could not reject the H0, however, is unusual. It is possible that producers surveyed in Honduras did not perceive an increase of time being spent on training and

	of Honduras, all SPOs are not compliant.	meetings for these activities when compared to previous years, possibly contributing to the sentiment that "extra time" is not being spent. Of note, these quantitative results do not demonstrate the connection between Fairtrade certification and the presence of even more connections for training and meetings, which was seen in the qualitative results.
--	--	---

Additional (non-statistical) Evidence on the Perceived Advantages and Disadvantages of Conservation and Agroforestry

The quantitative survey process revealed additional information about perceived advantages and disadvantages of conservation and agroforestry among cocoa and coffee producers. However, as these findings did not reach the 80% threshold required for statistical evidence, they cannot be considered quantitatively accurate, only qualitatively relevant. Across the board, the additional findings showed that there was a positive perception of the advantages of conservation, both among Fairtrade producers and non-Fairtrade producers in all three countries. When asked to describe any disadvantages of conservation, most respondents saw none. A few disadvantages mentioned, however, were i) the inability to collect cooking fuel from trees if conservation-related rules are followed (mentioned in Colombia); the possibility of conflict with animals if they enter newly biodiverse production areas (mentioned in Côte d'Ivoire); the high cost of effective protection (mentioned in Honduras); and the reduced availability of land for agriculture should more agroforestry be implemented (mentioned in Honduras and Côte d'Ivoire).

As for the advantages of efforts to conserve forested areas, many were listed. In Colombia, producers highlighted the positive benefits of nature or biodiversity protection, the increased possibility to collect medicinal plants or herbs, the spiritual value gained, and the creation of better micro-climates when conservation-related techniques are employed. In Honduras, producers highlighted the creation of better micro-climates and the protection of water resources as the most prevalent advantages or outcomes of implementing conservation-related activities, followed by the outcome of nature or biodiversity protection. Finally, in Côte d'Ivoire, the benefits of nature and biodiversity (and animal) protection were highlighted as particularly important advantages or outcomes of conservation-related efforts, as was the outcome of better micro-climates and the slowing of desertification (although the latter was only mentioned by the control SPO). Of note, there was little focus on carbon capture as a perceived benefit. These results may have relevance for the Fairtrade system as they work to promote conservation among smallholders.

In terms of agroforestry, perspectives of advantages and disadvantages were mixed. This provides additional insight to the quantitative findings above, which state that producers believed the advantages outweigh the disadvantages.

¹¹⁴ Answer options were possibly read aloud in this case, as the mention of each advantage was quite high.

Table 9. Perceived advantages and disadvantages of agroforestry revealed through quantitative research

Advantages	 Colombia ¹¹⁵: Members of Aguadas noted that agroforestry supports microclimates, soil fertility, and crop quality, and reduces plant susceptibility to pests and diseases. They noted that agroforestry can also increase income from fruit trees and other food crops. Members of the non-Fairtrade SPO noted that agroforestry improves soil fertility. Côte d'Ivoire: Members of all SPOs, both Fairtrade and non-Fairtrade, noted the main advantages of agroforestry as support to micro-climates and crop protection (i.e. crops under shade are protected). A few members mentioned that agroforestry can lead to additional income from trees (fruits, nuts, timber) and food crops (plantain, yam), as well as to improved biodiversity. Honduras: Members of the Fairtrade SPOs noted that agroforestry leads to income or food security from other trees and to increased crop quality. They also mentioned that agroforestry protects water sources and reduces the need for weed control. Members of the non-Fairtrade SPO noted that agroforestry protects micro-climates and improves soil fertility and crop quality.
Disadvantages	 Colombia: In total, 80% of members of both the Fairtrade and non-Fairtrade SPO did not see any disadvantages to agroforestry, demonstrating statistical rejection of disadvantages. Côte d'Ivoire: A few members mentioned that agroforestry can lead to reduced productivity, increased threat of loggers, and even more pests and diseases. However, these disadvantages were only minimally mentioned. Honduras: A few members mentioned that agroforestry can lead to reduced productivity, additional labour, and slow return on investment. However, these disadvantages were only minimally mentioned.

 115 Once again, answer options were possibly read aloud in this case, as the mention of each advantage was quite high.

Evidence of Best Practice Among Cocoa and Coffee Producers¹¹⁶

Table 10. Results from quantitative research demonstrating best practice adoption among cocoa and coffee producers

Question	Quantitative Results	Interpretation Against Qualitative
		Results
Practicing Agroforestry ¹¹⁷	For all SPOs, except for the non- Fairtrade SPO in Côte d'Ivoire, we can reject the H0 of non- compliance and, therefore, state that they prove statistical evidence of the implementation of agroforestry practices.	We could interpret the lack of rejection of the H0 for the control group in Côte d'Ivoire as aligned with the results of the qualitative interviews that stated that due to lower yields and lower income, it has been difficult for farmers to afford the purchase of saplings and, therefore, the investment in agroforestry has not been possible.
Visits to any SPO demonstration plots on GAP (e.g. agroforestry) in the past year (Y/N)	No SPO is compliant and therefore we cannot reject the H0 of non-compliance.	While ECACOM did mention during the qualitative field work that they brought some producers to taste the quality of other farmers' cocoa who had adopted agroforestry, and noted that this encouraged agroforestry adoption, this may have been a one-off event. Typically, training programs on GAPs seem to include coaching by agronomists, who visit each farmer individually to advise and monitor implementation of practices according to individual farm development plans.
Introduced or implemented shade trees or agroforestry in the past year (Y/N)	For Colombia, in Aguadas, we can reject the H0 of non-compliance and state that they have introduced or implemented shade trees or agroforestry. This is not the case for the control SPO. For Honduras, only in COMISUYL, we can reject the H0 of non-	These results are different from the results obtained from the qualitative interviews, where it appears that shade tree or agroforestry interventions have been executed across the board by the different SPOs, even the non-Fairtrade SPOs. On the other hand, these results do seem to point towards Fairtrade as an effective mechanism leading to

implemented in the past year to comply with Fairtrade standards. For the non-FT SPOs, the compliance with Fairtrade Standards was omitted. In the case that respondents reported to have not invested in agroforestry in the past year, this does not translate into respondents not practicing agroforestry, as it is also possible that perhaps they were already practicing agroforestry before.

¹¹⁷ However, producers from Aguadas, COMISUYL and the non-Fairtrade SPOs in Honduras and Côte d'Ivoire noted that there is evidence of a lack of implementation of agroforestry practices in some places and evidence of cutting trees. Planting cocoa or coffee trees in protected areas was also mentioned as occurring by members of all Côte d'Ivoire SPOs and by COMISUYL members. Farmers also mentioned that they have seen reprimands for these actions, with the only members not mentioning any reprimands being those from COMSA and the non-Fairtrade SPO in Colombia. Of note, none of these findings reached the 80% threshold required for statistical evidence.

have introduced or implemented shade trees or agroforestry. For Côte d'Ivoire, in the Fairtrade SPOs, we can reject the H0 of non-compliance and state that they have introduced or implemented shade trees or agroforestry. The control group is not compliant.

For Colombia, we can reject the H0 of non-compliance and state

agroforestry. COMSA, however, remains an outlier, as from the qualitative field work, they do seem to be active in different activities related to agroforestry.

Introduced measures to protect biodiversity in the past year (Y/N)

For Colombia, we can reject the H0 of non-compliance and state that all SPOs have introduced measures to protect biodiversity. For Honduras, all SPOs are not compliant. For Côte d'Ivoire, for the Fairtrade SPOs we can reject the H0 of non-compliance and state that all SPOs have introduced measures to protect biodiversity. This is not the case for the control SPO.

We could state that there is a lack of knowledge of the meaning of biodiversity among producers in Honduras, which led to non-compliance for all the SPOs. Or, perhaps they have been active on biodiversity already, so no new measures were introduced this year. However, this remains speculative. In the case of the non-Fairtrade SPO in Côte d'Ivoire, it is more likely that biodiversity has not been part of their interventions, due to their reduced connection to sustainability-related interventions as compared to the Fairtrade SPOs.

GAPs implementation¹¹⁸

In this question, a positive answer was requested when farmers were able to name at least four good agricultural practices (GAPs) that matched a predetermined list; the list was: erosion management, improved pruning, manual pest management, application of organic fertilisers, shade trees/agroforestry, measures to protect pollinators, planted disease-resistant varieties, and diversification measures.

In the case of Colombia and Côte d'Ivoire, we can reject the H0 of non-compliance and, therefore, state that all SPOs showed statistical evidence of their awareness and implementation of GAPs. In the case of Honduras, only for COMSA, we can reject the H0 of non-compliance and confirm statistical evidence of their awareness and implementation of GAPs.

This guestion shows that there is no difference between the Fairtrade SPOs and the control groups in Colombia and Côte d'Ivoire when it comes to knowledge and implementation of GAPs. In Honduras, however, we could say that COMSA is a positive outlier; in the case of COMISUYL and the control SPO, they are both statistically not rejecting the H0. This seems striking in some ways, when compared to the Honduran SPOs' awareness on the EUDR and other issues evident in the qualitative research. However, Honduran SPOs did not link challenges with yield to climate change, which does indicate some lack of awareness on GAP-related issues.

¹¹⁸ However, that some producers are not implementing GAPS was mentioned by members from all Fairtrade and non-Fairtrade SPOs in all countries during the quantitative phone surveys, with some farmers noting that they have seen reprimands for lack of compliance with GAPs. None of these findings reached the 80% threshold required for statistical evidence.

Purchase of agricultural inputs in the past year (Y/N)	For all SPOs in Colombia and Côte d'Ivoire, we can reject the H0 of non-compliance and, therefore, state that they provide statistical evidence of having bought agricultural inputs as investments for their farm in the past year. In the case of Honduras, all SPOs are not compliant.	It appears strange that in the case of Honduras, individual producers have not purchased agricultural inputs, being a key component of coffee production. However, this information could be interpreted as a decrease in purchasing power due to the lower sales that Honduras experienced in the 2022/23 season (this was mentioned in the qualitative research). Other explanations would be that farmers access free inputs from their partners and other entities, or that they are not purchasing inputs as they are creating
Extra time investment for pruning and/or weeding in the past year (Y/N)	For all SPOs in the three countries we can reject the H0 of non-compliance and, therefore, state that they provide statistical evidence of having invested additional time for pruning and/or weeding.	them organically on-farm. While this issue was not raised in the qualitative research, many SPOs and producers did note how time-intensive cocoa and coffee production is, and how it is not properly compensated. That farmers believe they are putting in extra time for pruning and weeding demonstrates that cocoa and coffee production is demanding.
Additional post-harvest processes (drying, fermentation) in the past year (Y/N)	For all SPOs in Colombia and Côte d'Ivoire, we can reject the H0 of non-compliance and, therefore, state that they provide statistical evidence of conducting additional postharvest processes. In the case of Honduras, all SPOs are not compliant.	This result could be connected with the fact that Honduran coffee is less recognized in the market for its sensorial quality compared to Colombia (and other countries) and, therefore, producers might be less inclined to experiment with various post-harvest processing. Again, this is mostly speculation, and it is hard to say whether this is the reason behind these results, since post-harvest practices were not part of the qualitative inquiry.
Other farm investments in the past year (Y/N)	Coffee SPO members respondents mentioned recycling, purchasing traps for the coffee berry borer, buying a de-pulping machine, a new mower and solar-drier, liming, stopping the use of chemicals, wastewater management, nurseries, and organic fertilisers produced in-house. For cocoa SPO members, they mentioned recycling and composting, no use of herbicides, activities	These results demonstrate ongoing action on the part of farmers to adapt to and mitigate climate change. However, the LQAS survey methodology did not necessarily assess the contribution of Fairtrade to these endeavours.

against child-labour, and	
1 3	
livestock production.	

Phase Four: Buyer Interviews

According to the results presented in the report published for internal use by Fairtrade in 2022, "The Value of Fairtrade: Business Engagement in Banana, Cocoa and Coffee Value Chains" Fairtrade businesses have been increasingly looking to the association for evidence of the system's impact on social, economic, and environmental dimensions. This includes evidence related to HREDD and zero deforestation. In light of this, two traders were consulted after the verification workshops to assess their perspectives on Fairtrade's current role in forest monitoring and curbing deforestation. While these interviews were quite limited in scope, they may provide additional insights for the Fairtrade system. Both interviewees were representatives of traders who have been buying from one of the Fairtrade SPOs in the study for a minimum of five years. The representatives were active in sourcing and policy in their companies, especially as related to EUDR compliance.

In the case of the buyer of COMISUYL's coffee in Honduras, their parent company, a larger global trader, has been developing an in-house tool to validate the deforestation risk of their suppliers and ensure all their coffee is deforestation-free. The tool will also help identify non-compliance with the EUDR. The interviewed buyer noted that using this tool, they (or, their partner companies on the ground in producing regions) are collecting geolocation data of farmers in an effort to support deforestation monitoring and to identify risks. Based on these risks, they plan to work directly with suppliers to understand what additional support might be needed for compliance. At present, they are concerned about non-compliant farmers in their current supply chain, as they do not want to abandon longer-term supplier relationships by shifting to new, compliant partners.

Interestingly, the COMISUYL buyer perceived Fairtrade's role in preventing deforestation as related to pricing and premiums only; if well invested, they mentioned that those **monetary** gains could lead to initiatives that curb deforestation. The interviewee furthermore believed that Fairtrade standards were not as well aligned with the EUDR as RA standards, which they noted could cause Fairtrade to lose market access in Europe. They further had the perception that Fairtrade was more of a livelihoods-focused certification, rather than an environmental one. While such a perception may not be widespread, it is still one to be combatted. In addition, that this trader is conducting their own data collection with farmers is relevant, as it indicates that parallel actions are taking place, and SPOs are accessing additional support. In this context, ethical data sharing among entities becomes critical.

In the case of the trader buying from Aguadas in Colombia, the interviewee spoke of having actively invested in the cooperative through providing capacity-building programmes and strategic support for implementation of GAPs. In regard to deforestation, the trading company has begun to support the cooperative to collect geolocation data. In addition to the work they are doing with Aguadas, the company has been collaborating with other organisations, such as Solidaridad, to prepare for EUDR. Specifically in collaboration with Solidaridad, the company is currently comparing various Geographic Information System (GIS)

and satellite-monitoring tools, like Argis, to test their accuracy in monitoring deforestation and their capacity to lead to alerts. The company has also developed a guide for data collection in the field, and has conducted training sessions for producers in Colombia, Honduras, and Peru, where they see a high risk of deforestation. In the case of non-compliance or alerts, they plan to conduct ground-truthing and work on an individual basis with producers to establish a deforestation mitigation plan.

These findings confirm evidence from the field, and point to the relevance of non-Fairtrade partnerships for environmental action. Still, coherence among projects and information sharing remains critical. As one example, the Aguadas buyer noted that all of their efforts are conducted in collaboration with other organisations, and they urged Fairtrade's involvement in pilot programs, ongoing discussions, and producer training. Fairtrade, of course, is highly involved in this regard, so the buyer's comments point to a lack of awareness of Fairtrade actions. The buyer furthermore saw the value of Fairtrade standards and premiums in preventing deforestation (e.g. when premiums are used to support technical assistance and compliance), but lacked clarity on the specific tools Fairtrade offers to SPOs and their expertise on the topic of deforestation. Once again, these point to the need for increased awareness among many buyers.

Conclusions and Recommendations

The Impact of Fairtrade

This report summarises available primary and secondary research to assess the extent to which, and if and how, Fairtrade incentivises or de-incentivises deforestation and forest protection in the cocoa and coffee sectors through its standards and tools. Based on system-level interviews with Fairtrade stakeholders, a Program Theory was developed, demonstrating hypotheses about how system-wide interventions de-incentivise and curb deforestation and lead to forest protection. The program was tested through field research with SPOs and member farmers in Colombia, Côte d'Ivoire, and Honduras, and findings from this research were validated with relevant SPO leaders. Through this process, the study's initial goals were accomplished. Table 11 demonstrates:

- Where and under which conditions Fairtrade pricing regulations have an influence on the deforestation practices of smallholder farmers, especially within the cocoa and coffee sectors.
- The potential impact on deforestation of Fairtrade pricing tools as compared to the impact of price fluctuations on the commodities markets for cocoa and coffee.
- Possible correlation between deforestation and the FTP or the payment of the minimum price and/or organic differential (if applicable).
- The impact of standard criteria prohibiting deforestation and/or obliging forest (and biodiversity) protection.
- The impact of producer programmes, capacity building, and projects on the implementation of measures to protect forests (and biodiversity), and on the establishment of agroforestry in cocoa and coffee production.

• The impact of other Fairtrade influences on farmer practices as related to forest protection or usage.

Table 11 also provides recommendations on how Fairtrade can further facilitate the development of effective ways to protect forests in the context of small-scale cocoa and coffee production.

Table 11. Evidence of Fairtrade's impact on deforestation prevention and forest protection, mapped against its ToC

Intervention	Conclusions and Recommendations
Premium and sustainable pricing mechanisms	Conclusions Answers the questions: 1) Where and under which conditions Fairtrade pricing regulations have an influence on the deforestation practices of smallholder farmers, especially within the cocoa and coffee sectors. 2) The potential impact on deforestation of Fairtrade pricing tools as compared to the impact of price fluctuations on the commodities markets for cocoa and coffee. 3) Possible correlation between deforestation and the FTP or the payment of the
	FMP and LIRP: The field research aligned with Fairtrade stakeholders' perception that the FMP (and LIRP, when present) are important tools in curbing deforestation and promoting forest protection. In particular, the qualitative findings suggest that price volatility and other factors impact livelihoods as well as capacity to invest in improved practices. In response to this reality, farmers and SPOs alike believe that the FMP (and the LIRP, when present) support increases to producer income and therefore capacity to enhance GAPs and other activities that can limit deforestation. Meanwhile, the quantitative findings do seem to suggest that perhaps more often than not, farmers in Fairtrade SPOs have taken actions to implement agroforestry and plant shade trees. While an absolute causal connection between the Fairtrade system (and, more specifically, the FMP) and increased action on the environment/decreased deforestation cannot be made, correlation seems to exist. However, the qualitative research findings indicate that while perceptions of the FMP are positive, SPOs and farmers agree that this mechanism alone is not enough; prices are still low, 119 limiting land purchase, farm investments, and more. Of note, respondents in this study did not necessarily mention that the FMP's stabilising effect drove SPO and farmer capacity for increased environmental action; rather, they focused on the impact of increased pricing in general (i.e. pricing above commodity price).
	a critical tool in curbing deforestation and promoting forest protection, as SPOs are often applying their FTP for environmental activities. In some cases, SPOs are using the FTP for reforestation and farm mapping. While this demonstrates that the FTP is indeed being leveraged for climate action and action on deforestation compliance,

¹¹⁹ At the time of this research, higher market prices (2023/2024 season) are occurring, but this does not necessarily indicate that farmers believe the prices are high, as they do not directly benefit. Especially in regulated markets there is evidence that price benefits are not transmitted to farm-gate:

https://www.uncommoncacao.com/blogs/uncommon-cacao/what-is-going-on-with-cocoa-prices-part-2.

some Fairtrade stakeholders lamented that the FTP would be used for this compliance, as they believed that the price of cocoa and coffee should cover compliance necessities. Indeed, using the FTP for compliance (EUDR in particular, even in areas where deforestation is not a risk) can have potentially negative implications for many smallholder farmers across the Fairtrade system, as it means the FTP is not being used for social (or otherwise environmental) projects or as cash payments. Furthermore, the FMP is supposed to cover compliance with standards, as it is supposed to be greater than or equal to the COSP for the product in question. Fairtrade's COSP calculations are intended to include all activities related to compliance with Fairtrade core requirements.

<u>FTP Committee:</u> No insight on the FTP Committee in particular was gleaned from the research, nor was there information that emerged which related to the Committee's impact on FTP usage. However, qualitative and quantitative findings do reveal that perceptions are mixed on how much of a risk deforestation truly poses in farming communities. This indicates that there may be some misinformation present among SPOs and farmers, and such misinformation could impact FTP usage.

Recommendations

Results reveal that Fairtrade's pricing and premium regulations allow SPOs and farmers to take increased action on climate and the environment, including actions that reduce deforestation. However, given market factors and the challenge of maintaining market access for farmers while also increasing prices and premiums, Fairtrade is limited in sparking even more action. Within this context, the following recommendations are relevant.

<u>Fairtrade International:</u> It is clear that Fairtrade SPOs and farmers are taking action on the environment and leveraging Fairtrade resources to do so. They are also leveraging resources to demonstrate their compliance with environmental regulations. Disseminating information to document this reality as well as the overall impact of Fairtrade may increase awareness of Fairtrade as an environmental solution. With more awareness, Fairtrade could increase their market share. However, Fairtrade should also raise awareness about how market factors continue to limit their capacity to increase FMP – as this limits SPO and farmer capacity for increased action.

NFOs: NFOs in the Fairtrade system should raise awareness about the challenges that Fairtrade SPOs and farmers face in ensuring compliance with new regulations without additional financial support. Ideally, this may lead to more cooperation between buyers and suppliers, and more finance for SPO- and farmer-led action. NFOs should consider fomenting more O2B projects that focus on supporting SPOs and farmers to take increased action on the environment; these projects can include compliance-related support.

<u>PNs:</u> Given that perceptions about environmental risks varied among SPOs and farmers in the field research stage of this study, Fairtrade PNs should continue to raise awareness among SPOs on real deforestation risks and other needed elements of environmental protection. SPOs close to deforestation hotspots (in all cocoa- and coffee-producing countries) could be prioritised for training. This may contribute to

SPOs and farmers utilising the FTP as effectively as possible in the current climate. Additionally, PNs should enhance their capacity for O2B project management.

<u>Buyers</u>: Buyers should educate themselves about the actions that SPOs and farmers in the Fairtrade system are taking on the environment, and support their work financially, both through more purchases on Fairtrade terms and through additional support for environmental action and compliance (e.g. through O2B projects).

Standards and certification

Conclusions

Answers the question: The impact of standard criteria prohibiting deforestation and/or obliging forest (and biodiversity) protection.

Standard Requirements: The field research aligned with Fairtrade stakeholders' perception that standard requirements are key to de-incentivising and curbing deforestation and promoting forest protection. SPOs believed that EUDR compliance was made easier due to Fairtrade standards, and Fairtrade standards were also perceived as precursors to market access and income improvements, as they can lead to product quality enhancements that increase price. Furthermore, while the quantitative evidence does not reveal an absolute causal connection between Fairtrade standards and adoption of agroforestry, it does seem clear that Fairtrade SPOs are likely to have taken actions to implement agroforestry and plant shade trees (i.e. there is a correlated connection). This is distinct from actions to promote biodiversity, which were confirmed by members of all SPOs in the quantitative sample, Fairtrade or otherwise. In other words, biodiversity promotion is equally present among Fairtrade and non-Fairtrade farmers, while agroforestry is more present among Fairtrade farmers in the sample (at least in the past year) – which is possibly correlated to standards compliance.

<u>Training:</u> The field research aligned with Fairtrade stakeholders' perception that training is essential to de-incentivising and curbing deforestation and promoting forest protection. However, across the board, even more training was requested. While the quantitative results did not reveal with specificity which trainings were related to standards and which were related to other activities, they do confirm that participation in some sort of training is common among members of all SPOs, Fairtrade or otherwise. According to the qualitative results, spillover effects of Fairtrade training are also common, with non-Fairtrade farmers asking Fairtrade farmers for advice.

Recommendations

It is clear from the findings that there is correlation between the Fairtrade system and actions to adopt agroforestry. This may be related to SPOs' and farmers' compliance with and training on Fairtrade standards. Meanwhile, evidence suggests that Fairtrade stakeholders' capacity to comply with international regulations like the EUDR are enhanced by the presence of standards and training on those standards. Moving forward, the following recommendations are made.

<u>Fairtrade International:</u> Fairtrade International should continue to raise awareness on the impact of their standards and their connection to agroforestry adoption. It is clear from the evidence that Fairtrade standards are key to both curbing deforestation and promoting forest protection. The more awareness there is on this reality, the more Fairtrade enhances its relevance as a partner in environmental action. Meanwhile, Fairtrade should continue to enhance and update their standards as relevant, and also raise awareness about their cost. This latter point may require staff with greater expertise on sustainability compliance (see below recommendation for hiring recommendations).

NFOs: NFOs should continue to raise awareness on the value of Fairtrade standards and related training, and support buyers to disseminate this information to consumers. In doing so, they may promote more awareness about the value of the Fairtrade system and the cost of standards compliance, which could lead to more sales on Fairtrade terms or additional support for compliance.

PNs: PNs should continue to work with others in the Fairtrade system to provide training on and support for standards adoption and compliance. In terms of standards training, SPOs and farmers would benefit from more training on i) how to conduct and respond to risk assessments; ii) how to develop and implement farm improvement plans; and iii) how to adapt to EUDR compliance and verification. Importantly, support should include financial as well as technical support to ensure that SPOs and producers do not have an undue financial burden when it comes to standards compliance. Additionally, it may be relevant for PNs in the Fairtrade system to consider raising awareness on the benefits of agroforestry and sustainable production in general. At present, perceptions among farmers vary, though it is clear from the research that the more awareness there is on climate change and the environment, the more action is taken on GAPs adoption, agroforestry, plot rejuvenation, etc.

<u>Buyers</u>: Buyers should educate themselves on the value of Fairtrade standards, and through O2B projects or other, support PNs to provide enhanced training on standards. Buyers should also support financially the capacity of SPOs and farmers to comply with the new standards, as at present, compliance with EUDR is posing a financial risk. The research furthermore reveals that farmers are requesting additional incentives for environmental action in general, so buyers may also consider PES and other avenues for the provision of ongoing incentives for environmental action.

Producer support and producer networks

Conclusions

Answers the question: The impact of producer programmes, capacity building, and projects on the implementation of measures to protect forests (and biodiversity), and on the establishment of agroforestry in cocoa and coffee production.

<u>Training and programmes:</u> The field research aligned with Fairtrade stakeholders' perception that Fairtrade training and programmes are critical for de-incentivising and curbing deforestation and promoting forest protection. One common sentiment revealed during the qualitative research phase is that Fairtrade training leads to agroforestry adoption, and awareness raising about agroforestry. Perceptions on the relevance and benefits of agroforestry varied, however. Furthermore, while the

qualitative results revealed that PNs have been supportive in providing information as related to the EUDR, awareness about EUDR still varied and more incentives for compliance were required. Still, the fact that many farmers are aware of EUDR indicates some success on the part of PNs (and buyers) in the transmission of important information.

Tailored projects: All former and current Fairtrade SPOs reported extensive partner networks, with Fairtrade SPOs being more connected to a variety of public, private, and civil society organisations than non-Fairtrade SPOs. In many cases, these projects were PPPs between Fairtrade and others, while in other cases, projects were between Fairtrade and private sector actors only (referred to as O2B projects in Fairtrade language). Both project types demonstrate Fairtrade's success in driving tailored projects for the benefit of cocoa and coffee producers. In the context of this study, mostly deforestation-related projects were explored. While the specific outcomes of these projects were not thoroughly analysed, it is significant that there is correlation between holding a Fairtrade certification and being more involved in sector-wide initiatives run by a variety of actors.

Recommendations

Similar to the findings noted above, training for SPOs and farmers is an important aspect of Fairtrade's environmental impact. Training often takes place in the context of PN-led projects, but Fairtrade also engages in other projects, such as research projects to establish the best plans for targeted action. As it is clear that Fairtrade's project work is an essential part of their impact, the following recommendations are made.

Fairtrade International: In order to enhance the design and outcomes of projects, the Fairtrade system should consider employing more staff with qualifications and experience in geography, agricultural sciences, soil sciences, carbon sequestration, tropical forestry, land use planning, etc. to strengthen all efforts related to curbing deforestation and promoting forest protection. Not only will this enhance support to SPOs and producers via training and outreach, but it can also foment a better and deeper understanding of the environmental dimension within the Fairtrade system; such staff could strengthen the Center of Excellence Climate & Environment, support standards updates and compliance, and oversee tailored projects related to climate topics. These staff members could also work with the Global Impact team to standardise environmental impact and project-based reporting, and build a better evidence base for the impact of Fairtrade efforts and projects.

NFOs: NFOs should continue to promote O2B projects among buyers and work to enhance market access. While not an easy task, evidence from the study suggests that SPOs and farmers are requesting more collaboration with supply chain actors, and increased market access under Fairtrade terms. The study also suggests that more resources are needed to support Fairtrade's environmental work; advocacy by NFOs may influence buyers or others to provide these resources.

<u>PNs:</u> Given the varied awareness among SPOs and farmers about the impact of certain activities, such as agroforestry, PNs may consider working with others in the Fairtrade

system to disseminate more information on the value of improved practice. In addition, results from this study seem to indicate that sampled farmers in Honduras may not be aware of the actions of Fairtrade. PNs may consider further validating the study's results, as lessons learned could be incorporated into ongoing projects. In addition, PNs may consider working with the Global Impact team to better standardise impact reporting across projects to better account for subtle differences in awareness or outcomes. Indeed, any effort to enhance capacity among PNs for project-based work will continue to demonstrate their relevance as an important project partner/manager of programmes.

<u>Buyers</u>: Buyers should increase their awareness on the impact of project-based work, and collaborate with Fairtrade and others to fund more programmes and capacity building for PNs, SPOs, and farmers. It is clear, however, that buyers are also engaging in projects on their own without collaborating with Fairtrade. While these projects are beneficial, it is important that buyers share information with Fairtrade to avoid duplication of efforts.

Brand and market development

Conclusions

Answers the question: The impact of other Fairtrade influences on farmer practices as related to forest protection or usage.

<u>Licensing:</u> While the research from this study demonstrates correlation between a Fairtrade certification and reduced risk of deforestation, no causal relationship can be confirmed. This aligns with the expectations of Fairtrade stakeholders.

Growth in emerging markets: While some Fairtrade stakeholders worried that the EUDR would lead to more deforestation should farmers choose to begin planting crops with less scrutiny, this was not highlighted during the field work. The qualitative field work instead demonstrated that there is across-the-board awareness of the importance of conservation, as did the quantitative field work. However, once again, both the qualitative and quantitative results revealed that there are differing perspectives when it comes to the advantages of agroforestry and diversification. Farmers noted, for example, that shade trees can reduce yields and that diversification often does not lead to income, but rather food security. Diversification is furthermore not always possible in some climates. Regardless, across the board, quantitative results reveal that farmers believe that the advantages of agroforestry outweigh the disadvantages.

<u>Public campaigns and Tailored solutions</u> The field research for this study did not assess the impact of Fairtrade public campaigns. However, it did confirm the relevance of support from buyers and other actors.

Recommendations

Results reveal the relevance of the Fairtrade system as an environmental solution for global trade. Beyond the recommendations already mentioned, Fairtrade International may consider exploring further the impact of their public advocacy work. As a number of recommendations are linked to awareness raising, Fairtrade may

consider conducting research to understand where and how their awareness raising schemes are most effective, in order to enhance advocacy efforts that have the most impact. In addition, as it is clear from the research that many buyers are not aware of the impact of Fairtrade or its actions, such research could support Fairtrade to build a solution to improved awareness-raising.

Data and intelligence

Conclusions

Answers the question: The impact of other Fairtrade influences on farmer practices as related to forest protection or usage.

<u>Producer-driven data systems and ownership:</u> The qualitative results revealed a mix of awareness about digital tools, demonstrating both a need for increased awareness on this topic, and that information sharing via digital tools may be lagging behind. In addition, the quantitative results showed that producers are not necessarily aware of what practices their SPOs are taking when it comes to forest monitoring, though they are aware that farm mapping is taking place. This demonstrates a possible lack of awareness about the purposes of mapping or its connection to forest monitoring.

<u>Integrated supply chain data systems:</u> The field work did not reveal any clear connection between Fairtrade certification and digital maturity or digital tool use. The qualitative results did show progress on farm mapping among Fairtrade SPOs, but also indicated the need for more training and resources. In addition, SPOs are concerned about the price of digitalisation, the lack of connectivity in rural areas, and their lack of access to hardware and software to support their digital growth.

Recommendations

The results demonstrate the importance of digital tool application in global trade, and the need for the Fairtrade system to enhance digital maturity among SPOs and farmers. Digital maturity will allow for their increased capacity to respond to the EUDR and will lead to new opportunities for information sharing. In light of the study's findings, the following recommendations are made.

<u>Fairtrade International:</u> Similar to the above recommendation on hiring technical staff with expertise in climate-related topics, hiring staff with expertise in digitalisation is also critical. Such staff could support the implementation of Fairtrade plans and policies as related to digitalisation, improve projects and programmes intending to enhance digital uptake, and oversee progress. In addition, Fairtrade should confirm their approach to data privacy, and ensure their policy is communicated and followed throughout the Fairtrade system. As Fairtrade is also trying to enhance data sharing, staff with expertise in digitalisation could support these efforts.

NFOs: NFOs should consider increasing awareness among buyers and other stakeholders about the relevance of digital tools as well as their costs and challenges. In response, buyers and others may be interested in supporting digital tool adoption through enhanced training or other projects. SPOs and farmers in particular noted the need for financing to employ digital tools; NFOs could support in this endeavour,

especially by incorporating digitalisation work into O2B projects. NFOs could also indicate that with increased capacity for digitalisation, data sharing will also increase.

<u>PNs:</u> As SPOs and farmers requested more support for digitalisation and training on digital tools, PNs should enhance their own understanding and capacity in this realm to provide a targeted response. In particular, PNs could support SPOs and farmers to collect, store, and analyse data, and use it for decision-making. In addition, PNs should support SPOs to better communicate to their farmers the value of digital tool use in the field, so that there is greater understanding of why certain tools are being used. For instance, many farmers in the study were unaware of the purpose of mapping, but knew that their farmers were being mapped. Finally, PNs should raise awareness on data protection and ownership, and support SPOs and farmers to understand the value of their data. PNs should also support data sharing among the Fairtrade system.

<u>Buyers:</u> Buyers should educate themselves about the relevance of digital tools and provide support to SPOs and farmers in their use. They should also educate themselves about data privacy, and commit to share data across the cocoa and coffee value chains for the benefit of SPOs and farmers.

Partnerships and advocacy

White papers/public position papers: While the field research did not explore participants' awareness of white papers, their adoption of agroforestry may reveal coherence among the system. In other words, it is striking that Fairtrade has defined sustainable production as agro-ecological production in their position papers and their new mandatory agricultural policy, and that Fairtrade producers are indeed adopting these practices. Still, more awareness about benefits of improved farming practices is needed, as are more incentives.

<u>Advocacy campaigns:</u> Once again, the field research for this study did not assess the impact of Fairtrade advocacy campaigns.

Recommendations

As mentioned, results reveal the relevance of the Fairtrade system as an environmental solution for global trade. It is furthermore clear that Fairtrade's public positioning on certain topics is coherent with their internal strategies and results. Within this context, Fairtrade may wish to explore further the impact of their public advocacy work to ensure that these efforts continue and can lead to enhanced financing for on-the-ground projects and programmes.

Closing Remarks

While evidence from the literature points to the fact that increased market access and pricing may incentivise agricultural-led deforestation, there is no evidence from this study that Fairtrade systematically causes deforestation or environmental degradation. Rather, through its pricing and premiums regulations, standards and tools, and producer support, the Fairtrade system is correlated with action on curbing deforestation and forest protection; it is also correlated with GAP adoption. Indeed, Fairtrade expects SPOs in the system to take action on social, economic, and environmental dimensions, as well as enhance good governance and

organisational development practices, as it is these efforts that are required via standards and compensated for by means of the FMP, the FTP, and the organic differential (where applicable). Given these expectations, it would follow that Fairtrade is more costly than other certifications.

While this study demonstrates that such expenditure is leading to action, it also demonstrates the relevance of increased spending, especially in the form of PPPs and O2B projects. Such projects can support Fairtrade standards compliance, enhancement of digital capacity and data sharing among SPOs and farmers, and much more. To spark more projects of this nature, Fairtrade should work with public, private, and civil-society sector actors to design and carry out targeted programmes in these impact categories. Such action will lead to an increase in producer-led activities that protect forests, mitigate climate change, and enhance biodiversity. Compared to non-certified SPOs, Fairtrade SPOs are also more equipped for such project-based work, making Fairtrade an important and trusted partner in the PPP landscape. Finally, as Fairtrade farmers may be at a lower risk of deforestation than non-Fairtrade farmers, as they now must comply with EUDR regulation and are likely to conduct agroforestry, Fairtrade can be considered an important partner for any trader looking to demonstrate their own compliance with EUDR and other environmental best practices.

References

Blackman, A., Corral, L., Lima, E.S. & Asner, G.P. (2017). Titling indigenous communities protects forests in the Peruvian Amazon. Proceedings of the National Academy of Sciences, 114(16): 4123–4128. https://doi.org/10.1073/pnas.1603290114

Blundo-Canto, G., Bax, V., Quintero, M., Cruz-Garcia, G.S., Groeneveld, R.A., & Perez-Marulanda, L. (2018). The Different Dimensions of Livelihood Impacts of Payments for Environmental Services (PES) Schemes: A Systematic Review. Ecological Economics, 149, 160-183.

Bymolt, R., Laven, A., Tyszler, M. (2018). Demystifying the cocoa sector in Ghana and Côte d'Ivoire. The Royal Tropical Institute (KIT).

Carodenuto, S. (2019). Governance of zero deforestation cocoa in West Africa: New forms of public-private interaction. Environmental Policy and Governance. 1–12. https://doi.org/10.1002/eet.1841

Curtis, P.G., C.M. Slay, N.L. Harris, A. Tyukavina, and M.C. Hansen. (2019). Classifying Drivers of Global Forest Loss. Science. DOI: 10.1126/science.aau3445

De Beule H, Jassogne L, van Asten P. (2014). Cocoa: Driver of Deforestation in the Democratic Republic of the Congo? CCAFS Working Paper no. 65. CGIAR Research Program on Climate Change, Agriculture and Food Security (CCAFS). Copenhagen, Denmark. Available online at: www.ccafs.cgiar.org

Dragusanu, R., Montero, E. and Nunn, N. 2022. "The Effects of Fair Trade Certification: Evidence from Coffee Producers in Costa Rica," Journal of the European Economic Association, European Economic Association, vol. 20(4), pages 1743-1790.

Ermgassen, S., Howard, M., Bennun, L, Addison P., Bull, J. W., Loveridge, R., Pollard, E., Starkey, M. (2022). Are corporate biodiversity commitments consistent with delivering 'nature-positive' outcomes? A review of 'nature-positive' definitions, company progress and challenges. Journal of Cleaner Production, 379(2). https://doi.org/10.1016/j.jclepro.2022.134798.

ETG | Beyond Beans. (2022). How ASASE is Helping Farmers Build Climate Resilience in Ghana. Notes From the Field. March 2022. ASASE: Accessible Soils and Sustainable Environments.

Fairtrade International. (2023). Monitoring the scope and benefits of Fairtrade: Latin American and Caribbean region - Monitoring report, 14th Edition. May 2023. Available at: https://files.fairtrade.net/publications/Fairtrade-Regional-Monitoring-report-Latin-America-and-the-Caribbean-2023.pdf

Fairtrade International. (2022). Monitoring the scope and benefits of Fairtrade: Africa and Middle East region - Monitoring report, 13th Edition. May 2022. Available at:

https://files.fairtrade.net/publications/2022-Fairtrade-regional-monitoring-Africa-and-Middle-East-13th-ed.pdf

Fairtrade International. (2023). Fairtrade West Africa Cocoa Programme Monitoring Report, 3rd Edition. July 2023. Available at: https://www.fairtrade.net/library/fairtrade-west-africa-cocoa-programme-monitoring-report-3rd-ed

Fountain, A. C. and Hütz-Adams, F. (2020): 2020 Cocoa Barometer.

Ferrero. (2022). Cocoa & Forests Initiative Progress Report: Côte d'Ivoire and Ghana. May 2023. Available at: https://www.ferrerosustainability.com/int/sites/ferrerosustainability.int/files/2023-05/ferrero 2021-22 cocoa forests-initiative-light 0.pdf

Gee, D. & Wang, E. (2021). A ground truthed assessment of University of Maryland forest change dataset in four tropical regions against a deep learning generated dataset. Enveritas. Available at: https://www.herewegrow.org/media/pages/media/55ff42aeac-1700523377/211224 herewegrow enveritas deforestation white-paper web.pdf

Glover, D., Sumberg, J., Ton, G., Andersson, J. & Badstue, L. (2019). Rethinking technological change in smallholder agriculture. Outlook on Agriculture, 48(3), 169–180. https://doi.org/10.1177/0030727019864978

Ingram, V., van den Berg, J., van Oorschot, M., Arets, E., & Judge, L. (2018b). Governance Options to Enhance Ecosystem Services in Cocoa, Soy, Tropical Timber and Palm Oil Value Chains. Environmental Management, 62, 128–142.

Ingram, V., Behagel, J., Mammadova, A. and Verschuur, X. (2020). The outcomes of deforestation-free commodity value chain approaches. Forest and Nature Conservation Policy Group, Wageningen University and Research. Wageningen. The Netherlands.

Kessler, J.J., Nelson, V.J., Molenaar, J.W. (2021). Insights and Recommendations for Promoting Private Investment for Deforestation-Free Commodities.

Kouassi, J.L., Gyau, A., Diby, L., Bene, Y., Kouamé, C. (2021). Assessing Land Use and Land Cover Change and Farmers' Perceptions of Deforestation and Land Degradation in South-West Côte d'Ivoire, West Africa. Land, 10, 429. https://doi.org/10.3390/land10040429

Kroeger, A., Bakhtary, H., Haupt, F., & Streck, C. (2017). Eliminating deforestation from the cocoa supply chain. World Bank, Washington, DC. World Bank. https://openknowledge.worldbank.org/handle/10986/26549

Meemken, E. (2020). Do smallholder farmers benefit from sustainability standards? A systematic review and meta-analysis. Global Food Security, 26. https://doi.org/10.1016/j.gfs.2020.100373.

Meshesha, A.T., Birhanu, B.S., Bezabih Ayele, M. (2022). Effects of perceptions on adoption of climate-smart agriculture innovations: empirical evidence from the upper Blue Nile Highlands of Ethiopia, International Journal of Climate Change Strategies and Management, 14(3), 293-311. https://doi.org/10.1108/IJCCSM-04-2021-0035

Mighty Earth. (2022). Sweet Nothings. How the chocolate industry has failed to honor promises to end deforestation for cocoa in Côte d'Ivoire and Ghana. https://www.mightyearth.org/wp-content/uploads/MightyEarthSweetNothingsReportFINAL_UpdatedFeb142022.pdf

Mitiku, F., De Mey, Y., Nyssen, J., Maertens, M. (2017). Do Private Sustainability Standards Contribute to Income Growth and Poverty Alleviation? A Comparison of Different Coffee Certification Schemes in Ethiopia. Sustainability, 9(2), 246. https://doi.org/10.3390/su9020246

Orozco-Aguilar, L., López-Sampson, A., Leandro-Muñoz, M.E., Robiglio, V., Reyes, M., Bordeaux, M., Sepúlveda, N. and Somarriba, E. (2021). Elucidating Pathways and Discourses Linking Cocoa Cultivation to Deforestation, Reforestation, and Tree Cover Change in Nicaragua and Peru. Front. Sustain. Food Syst. 5:635779. doi: 10.3389/fsufs.2021.635779

Pendrill F., Persson U. M., Kastner, T. (2020). Deforestation risk embodied in production and consumption of agricultural and forestry commodities 2005-2017 (Version 1.0). Zenodo.

Pendrill, F., Gardner, T. A., Meyfroidt, P., Persson, U. M., Adams, J., Azevedo, T., et al. (2022). Disentangling the numbers behind agriculture-driven tropical deforestation. Science 377, eabm9267. doi: 10.1126/science.abm9267

Petrutiu, S., Steijn, C., Bitzer, V. (2021). Inclusive Business Cases Linking Agriculture and Conservation. KIT Royal Tropical Institute.

Pham, Y. (2019). 'The impact of climate change and variability on coffee production: a systematic review,' Climatic Change, Vol. 156, pp. 609-630.

Pokorny, B., Robiglio, V., Reyes, M., Romero, R.V. and Patiño Carrera, C.F. (2021). The potential of agroforestry concessions to stabilize Amazonian forest frontiers: a case study on the economic and environmental robustness of informally settled small-scale cocoa farmers in Peru. Land Use Policy, 102, (C)

Pyk, F.; Abu Hatab, A. (2018). Fairtrade and Sustainability: Motivations for Fairtrade Certification among Smallholder Coffee Growers in Tanzania. *Sustainability*, *10*, 1551. https://doi.org/10.3390/su10051551

Rainforest Alliance. 2021. Origin Issue Assessment, Peru, coffee.

Ravikumar, A., Uriarte, E., C., Lizano, D., Muñoz Ledo Farré, A., Montero, M. (2023). How payments for ecosystem services can undermine Indigenous institutions: The case of Peru's Ampiyacu-Apayacu watershed. Ecological Economics, Volume 205, March 2023, 107723. https://doi.org/10.1016/j.ecolecon.2022.107723

Rhoda, D. A., Fernandez, S. A., Fitch, D. J., & Lemeshow, S. (2010). LQAS: user beware. *International journal of epidemiology*, 39(1), 60-68.

Rodriguez, R. Ministerio de Ambiente y Desarrollo Sostenible, Colombia, personal communication, 22 September 2021. In: FAO. 2022. The State of the World's Forests 2022. Forest pathways for green recovery and building inclusive, resilient and sustainable economies. Rome, FAO. https://doi.org/10.4060/cb9360en

Ros-Tonen, M, Reed, J., & Sunderland, T. (2018). From Synergy to Complexity: The Trend Toward Integrated Value Chain and Landscape Governance. Environmental Management, 62, 1-14.

Rueda, X., Thomas, N.E. & Lambin, E.F. (2015). Eco-certification and coffee cultivation enhance tree cover and forest connectivity in the Colombian coffee landscapes. Reg Environ Change 15, 25–33 (2015). https://doi.org/10.1007/s10113-014-0607-y

Ruf, F., Schrot, G. and Doffangui, K. (2015). Climate change, cocoa migrations and deforestation in West Africa: What does the past tell us about the future? Sustain Sci 10, 101–111 (2015). https://doi.org/10.1007/s11625-014-0282-4

Ruf, F. (2021). Les standards dits durables appauvrissent-ils les planteurs de cacao ? Interactions entre déforestation en Côte d'Ivoire et au Libéria, crédit à l'achat d'engrais et baisse des cours. Cahiers Agricultures, 30, 38.

Schulte, I., Landholm, D.M., Bakhtary, H., Czaplicki Cabezas, S., Siantidis, S., Manirajah, S.M., Streck, C. (2020). Supporting Smallholder Farmers for a Sustainable Cocoa Sector: Exploring the Motivations and Role of Farmers in the Effective Implementation of Supply Chain Sustainability in Ghana and Côte d'Ivoire. Meridian Institute, Washington, DC.

SEO & KIT. (2022). Evaluating Fairtrade's Cocoa Pricing Model.

Snilsveit, B., Stevenson, J., Langer, L., Tannous, N., Ravat, Z., Nduku, P., Polanin, J., Shemilt, I., Eyers, J., & Ferraro, P.J. (2019). Incentives for climate mitigation in the land use sector—the effects of payment for environmental services on environmental and socioeconomic outcomes in low- and middle-income countries: A mixed-methods systematic review. Campbell Systematic Reviews, 19, 15:e1045.

Steffen, W., Persson, Å., Deutsch, L., Zalasiewicz, J., Williams, M., Richardson, K., ... & Molina, M. (2011). The Anthropocene: from global change to planetary stewardship. Ambio, 40(7), 739.

Takahashi, R. & Todo, Y. (2016). Coffee Certification and Forest Quality: Evidence from a Wild Coffee Forest in Ethiopia. World Development. 92. 10.1016/j.worlddev.2016.12.001.

Valqui, C., Feather, R., & Espinosa, L. (2014). Revealing the Hidden Indigenous Perspectives on Deforestation in the Peruvian Amazon. Asociación Interétnica de Desarrollo de la Selva Peruana and Forest Peoples Program (AIDESEP). Lima, Peru. https://www.forestpeoples.org/en/topics/rights-land-natural-resources/publication/2014/revealing-hidden-indigenous-perspectives-defor

Weisse, M. J., & Naughton-Treves, L. C. (2016). Conservation Beyond Park Boundaries: The Impact of Buffer Zones on Deforestation and Mining Concessions in the Peruvian Amazon. Environmental management, 58(2), 297–311. https://doi.org/10.1007/s00267-016-0709-z

Wienhold, K., and Goulao, L.F. 2023. The Embedded Agroecology of Coffee Agroforestry: A Contextualized Review of Smallholder Farmers' Adoption and Resistance. Sustainability. 15(8):6827. https://doi.org/10.3390/su15086827

Annex 1: Methodological Table

els and Driving Methodology e factors that drive or curb deforestation are social, cultural, economic, and political in nature. These tors also impact the success of deforestation-related interventions. Existing belief systems and their ated practices, for instance, interact with proposed interventions, while response motivations are tied to anomic needs and informed by producer histories, interactions, and context. Keeping this in mind, to ter understand the factors that drive or curb deforestation and impact interventions, the consultants blied a social-embeddedness lens during the desk review phase, and relied on a technological change mework. Social-embeddedness: Embeddedness is a concept founded by Karl Polanyi, who posited that economic activity interacts with non-economic institutions. Wienhold and Goulao (2023)'s text on how embeddedness interacts with agroecology adoption was an important guide for the consultants during the desk review phase. As possible, we attempted to understand the findings of each article via an embeddedness lens. Technological change: The technological change framework of Glover et al. (2019) analyses interventions as technologies. It considers how four aspects, propositions, encounters, dispositions and responses (PEDR) interact with change processes and affect outcomes. In other words, an actor's expectations of an intervention (propositions), their experiences of it (encounters), and their perceptions of it (dispositions) will affect how they engage (responses). As possible, we attempted to understand the findings of each article via a PEDR framework.
·
 total, the consultants reviewed more than 60 articles, choosing them from a list of over 80. The criteria for cosing them included their date of publication (after 2020 prioritised), a prioritisation of meta-reviews, and derage of all topics studied in this report, as well as coverage of the crops and countries in scope. Guiding Questions following questions guided our approach as we reviewed articles in the sample. Embeddedness: How does adoption or non-adoption of interventions interact with the diverse history, rationale, and interests of stakeholders? How do existing belief systems impact motivations and interpretations? How do structures – institutional, cultural, or otherwise – impact experience? Propositions: How does the initial introduction of an intervention affect perception and expectations surrounding it, and how do these expectations impact results? Encounters: How does the quality and intensity of engagement with an intervention affect one's response to it, and how do power structures play a part? Dispositions: What is the impact of various cultural, economic, and biophysical factors – among others – on one's experience with and adoption of an intervention? Responses: How can we understand responses to interventions in context, regardless of whether or not those responses were anticipated, intended, and/or desired by stakeholders.
als and Driving Methodology e goal of this stage was to better understand the perceived impact of Fairtrade on deforestation as ording to system stakeholders. The consultants applied an Outcomes Harvesting approach for this pose, which allowed us to i) understand stakeholders' views on a multitude of factors, and how these tors may have contributed to certain behaviours and achievements; and ii) collect evidence of what has inged in relation to deforestation as a result of Fairtrade interventions. In this case, we considered rtrade as both a blanket intervention as well as an organiser of several interventions. Outcomes resting was chosen as the approach for this stage of the assignment as it is used when interventions are ltiple, complex, or not fully understood by participants. It is also used when predetermined objectives we not been established. Indeed, while interviewees had clarity on the Fairtrade system and its erventions, they had not fully explored its impact on deforestation, as predetermined system-wide goals deforestation have not been confirmed.

certain intervention has achieved. To choose interview participants, together with Fairtrade, the consultants conducted purposive sampling, which is both common to qualitative research, and cost- and time-effective. In total, for this phase of the assignment, the consultants conducted 15 interviews via Zoom, with each interview lasting one to two hours.

Accounting for Bias

Outcomes Harvesting comes with the risk of observer bias. In the case of this project, participants may have had a bias about how effective the Fairtrade system is, or the researchers may have been at risk of producing an observer-expectancy effect, whereby desired responses are unconsciously signalled. To avoid these risks and biases, the consultants standardised the interview guidelines to minimise semi-structured additions that could be considered leading. Across the board, the interviewees were presented with up to 29 semi-structured questions, which were designed to gather information on each participant's role in Fairtrade, their knowledge of deforestation, their understanding of how Fairtrade prevents or mitigates forest loss, and their opinion on the success of system-wide interventions. Additionally, questions were designed to gather participants' opinions on the factors that drive or curb deforestation, and their suggestions for future targets that the Fairtrade system could set, as well as the partners the system could engage with.

Relevance of Program Theory

According to methodological convention, there is no need to establish a Program Theory prior to conducting Outcomes Harvesting. Rather, after the interview stage, a list of summarised outcomes leads to conclusions about how certain outcomes were achieved.

3a. Qualitative field work

Goals and Driving Methodology

The goal of this stage was to collect information from SPOs and farmers to assess their perspectives on the extent to which Fairtrade curbs or drives deforestation through its interlocking interventions. To do so, the consultants employed a **Realist Evaluation** approach, which focuses on contextual analysis and an exploration of why diverse actors make certain decisions in response to different interventions. Given that Realist Evaluation requires a Program Theory, the consultants first identified assumed (or evidenced) outcomes of the Fairtrade system as related to deforestation, and then leveraged the field work to further assess how the system works to achieve these outcomes in various contexts. In other words, based on the results from the interview phase above, the consultants developed a Program Theory (outlined in the body of this report) to describe our pre-field work hypothesis for how Fairtrade interventions curb or drive deforestation. Then, in conducting the field work, we focused on testing these hypotheses and understanding the mechanisms that lead to certain outcomes as well the context that influenced those mechanisms.

Sample

To carry out the field work, the consultants collaborated with Fairtrade to conduct purpose sampling of Fairtrade SPOs that could participate in the Realist Evaluation. In total, one Fairtrade SPO was chosen for participation in Colombia, and two were selected for participation in Cote d'Ivoire and Honduras. In addition, one non-Fairtrade SPO was chosen for participation in each country. While comparison groups are not needed in Realist Evaluation, we chose to select one non-Fairtrade SPO to draw deeper conclusions. The non-Fairtrade SPOs were chosen based on their interest level and ease of access.

<u>Limitations</u>

The SPOs chosen for this study were chosen given their relevance to particular NFOs in the Fairtrade system. They were not chosen based on deforestation risk or any other factor, which limits the results. Furthermore, as the non-Fairtrade SPOs were chosen based on proximity to the Fairtrade SPOs (for the same of reducing the travel budget), there are further limitations to the sample.

Accounting for Bias

Context itself can be considered a bias in Realist Evaluation. To account for this, the consultants sought to identify several contextual factors of relevance prior to the application of the field work, and also sought to explore context even further during the application of our chosen methodology. The factors of relevance we identified and sought to explore were:

- Key SPO data points (e.g. age, size, history, products, activities, buyers)
- Deforestation risk of SPO (high, medium, or low)
- Level of participation in Fairtrade (high or low)
- Participation in other programs, projects, and certifications (high or low, disaggregated by type)
- Amount of FTP spent on environmental interventions (high or low)
- Use of digital monitoring tools
- Presence of interventions proven to work

Socio-economic status of producers (e.g. farm size, yield, income level)

Tools and Key Guiding Questions

The consultants developed an interview guide to interview the leaders of each chosen SPO, and a focus group guide to engage with farmers of each SPO. In total, we conducted one focus group discussion per SPO, and up to 10 interviews per country with both Fairtrade and non-Fairtrade SPO leaders. Once again, a purposive sampling technique was applied to confirm participants. As we developed the interview and focus group guides, we sought to build questions that would test the accuracy of our hypotheses. Key guiding questions during the development of these methodological tools included:

- What are the contextual realities among the farmers and SPOs in question, and how does this context impact the success of interventions?
- How do social and cultural norms and rules govern behaviour in the context of Fairtrade or non-Fairtrade interventions?
- What is the relevance of the following factors as related to the success of interventions: institutional factors, cultural factors, economic factors, biophysical factors (e.g. topography, climate), and temporal factors?
- How do each of the factors of relevance influence outcomes or potentially bias results?
- What are the capacities, motivations, and perceptions of individuals, such as SPO managers and producers, and how does this influence the adoption or success of particular interventions?
- How do resource endowments, including, among others, financial, land, and labour resources, impact the success of interventions?

3b. Quantitative field work

Goals and Driving Methodology

The goal of the quantitative field work stage was to 1) evaluate the farmer-level activities, 2) triangulate the data from the above qualitative research phase, 3) explore whether other farmers had the same opinions regarding interventions as participants in the qualitative research phase, and 4) further assess Fairtrade's impact on deforestation. In order to meet these objectives, the consultants developed a survey using a **Lot Quality Assurance Sampling (LQAS) methodology**.

- The LQAS is a rapid appraisal methodology that can be used to monitor program implementation and to evaluate the pre-conditions for program success (Rhoda et al, 2010). It combines random selection of a small number of respondents with simple (yes/no) questions to make statistical inferences about the larger population using a benchmark. The minimum sample size to make statistically significant inferences is 19 per SPO. Because of the small sample size, the null hypothesis can be rejected only if a substantial number of respondents comply with the expectation in the Program Theory. For this, a threshold 80% was applied.
- In creating the survey, we were guided by the technological change framework, which again, analyses interventions as technologies. While seemingly qualitative in nature, the technological change framework allows for both quantitative in addition to qualitative research when combined with the right methodologies. By applying the LQAS approach, the consultants were able to assess similarities in behaviours among respondents, and explore whether their PEDR were similar, and why or why not. As relevant, we also looked at the extent to which Fairtrade interventions are effective for a majority of respondents.

<u>Sample</u>

To confirm the sample for the quantitative LQAS survey, the consultants collaborated with each of the selected SPOs from the qualitative field work phase to choose a random sample of 19 producer respondents per organisation. We also selected 30 random replacements in case phone numbers of the initial 19 were incorrect, respondents didn't answer, or didn't agree to participate. In total, we interviewed 158 respondents across the three countries. Nineteen producers each were surveyed from ECAMOM, COOBADI, COMSA, the control SPO in Colombia and in Honduras. For Aguadas, 22 producers were surveyed, 21 for COMISUYL and 20 for the control SPO in Cote d'Ivoire. Since the additional responses gathered from the three SPOs did not affect the overall accuracy of the LQAS system, all responses were maintained and analysed.

Limitations

The sampling methodology used for this project, while providing information on a wide variety of experience, was limited in its capacity to provide clarity on probability of experience, especially for specific populations (e.g. women). Indeed, out of the 158 respondents, only 37 happened to be women. Notably, in the case of Cote d'Ivoire, only one woman participated, indicating a significant gender imbalance in this sample area. Another limitation of this methodology relates to its small sampling that only allows to either validate or reject the hypothesis, without having the opportunity to understand further nuances to the data when

percentages are little only below or above the identified threshold (in this case the threshold was selected as 80% in order to provide statistical evidence).

Key Guiding Questions

As the goal of the quantitative survey was to triangulate the information obtained from previous phases, the following questions, among others, were kept in mind as we developed survey questions.

- How can we assess the extent to which SPOs are aware of the needs and ambitions of their members? Are members sharing different experiences than what is assumed by SPO leaders?
- What is the awareness of how external factors shape context? Are producers able to communicate how various factors shape their reality?

This study has been commissioned by Fairtrade Deutschland, Fairtrade International, Fairtrade Foundation UK, Max Havelaar France and Fairtrade Ireland and its implementation supported by Fairtrade Africa FTA and the Coordinadora Latinoamericana y del Caribe de Pequeños (as) Productores(as) y Trabajadores(as) de Comercio Justo (CLAC). Published by Fairtrade International, June 2024.













We would like to thank the following farmer organisations from Côte d'Ivoire, Colombia, and Honduras for their very valuable contributions: Coopérative Bassadougou de Diès (COOBADI); Société Coopérative avec Conseil d'Administration des Eco-Agriculteurs Modernes de Meagui (ECAMOM); Cooperativa de Caficultores de Aguadas; Cooperativa Mixta Subirana Yoro Limitada (COMISUYL); and Café Orgánico Marcala, S.A. (COMSA); as well as the non-Fairtrade certified cooperatives who volunteered to take part in the study.