

b UNIVERSITY OF BERN

CDE
CENTRE FOR DEVELOPMENT
AND ENVIRONMENT

#9 CDE Working Paper



Cocoa Pricing for a Living Income: Mechanisms, Regulatory Levers, and Limitations

Irene Musselli, Samuel Bruelisauer, Nicolas Porchet, Christoph Oberlack

Citation

Musselli I, Bruelisauer S, Porchet N, Oberlack C. 2025. *Cocoa Pricing for a Living Income: Mechanisms, Regulatory Levers, and Limitations.* CDE Working Paper 9. Bern, Switzerland: Centre for Development and Environment (CDE), with Bern Open Publishing (BOP). https://doi.org/10.48620/88120.

Series editors

Sabin Bieri, Anu Lannen (CDE)

Language editing

Anu Lannen (CDE)

Layout

Simone Kummer (CDE)

Cover photo

Irene Musselli (CDE)

Distribution

The PDF version of this paper can be downloaded from: https://www.cde.unibe.ch/research/publications/cde_working_papers/index_eng.html

Corresponding author

irene.musselli@unibe.ch

© 2025, the Authors and CDE

This work is licensed under a Creative Commons Attribution-NonCommercial-No-Derivative Works 3.0 License. See http://creativecommons.org/licenses/by-nc-nd/3.0/ to view a copy of the license. CDE encourages users to contact the author(s) of the work directly if they wish to reproduce it in any way.

DOI: 10.48620/88120 ISBN: 978-3-03917-110-1

This study was co-funded by the Swiss State Secretariat for Economic Affairs (SECO) through SWISSCO; the survey in Chapter 3 belongs to a project funded by the European Research Council (ERC) under the European Union's Horizon 2020 research and innovation programme (COMPASS project, Grant agreement No. 949852); Chapter 4 links to ongoing legal research under the SOR4D project CARE for value and sustainability (Grant 217988). The views expressed in this publication are those of the authors and do not necessarily represent those of the funders of this work.





Swiss Confederation

Federal Department of Economic Affairs, Education and Research EAER State Secretariat for Economic Affairs SECO



Contents

Executive summary 5				
1	1.1	oduction Purpose and scope of the study Methodology	9 9 10	
2	Set	ting the stage: The issue of farmgate prices	11	
3	Pricing models at enterprise and value chain levels			
		Sustainability governance strategies and pricing Mechanisms for cocoa pricing aimed at living income Do price elements differ by company size, age, value chain position, legal status and ownership?	18 19 20	
4	Ven	ues for upscaling: Public regulation	23	
	4.1	Stocktaking of past efforts at regulating cocoa prices	24	
	4.2	Reform options: Cocoa exporting countries (regulated markets) 4.2.1 Forward selling and the LID	25 25	
		4.2.2 Discounted farmgate prices?4.2.3 Addressing transparency and accountability challenges4.2.4. Revisiting supply-side management4.2.5. Exploring alternative pricing mechanisms	28 30 32 33	
	4.3.	Reform options: Cocoa importing countries 4.3.1 A human rights due diligence approach to living income 4.3.2 The inclusion of price terms in unfair trading practices (UTP) laws 4.3.3 Mandatory contractual mechanisms downstream 4.3.4 Easing competition law hurdles	35 35 37 40 41	
5	Con	clusion	43	
Ref	References 47			
Αb	out t	he Authors	51	

Executive summary

This report aims to improve our understanding of pricing schemes that are designed, explicitly or implicitly, to promote a living income for cocoa-farming communities. A living income is defined as the minimum net income needed for a household to maintain a decent standard of living for all its members. The report provides a systematic analysis of the similarities and differences among these pricing schemes while exploring innovative legal and institutional frameworks and approaches that could help to scale them to the macro level. By combining insights from micro-/meso-level analysis of private-sector innovations together with assessment of relevant regulatory developments at the macro level, the report addresses the prerequisites, challenges, and limitations of pricing strategies aimed at promoting a living income. Additionally, it examines potential solutions to overcome these challenges.

This analysis of price schemes aimed at a living income for cocoa producers is relevant – maybe even more so – while international market prices for cocoa are at historic highs, as is the case at the time of writing (early 2025). The present report highlights three main reasons for this ongoing relevance: (1) pre-season price fixing in contracts and/or forward selling and reduced pass-on shares mean that producers and producer organizations only partly benefit from current price hikes, particularly in regulated cocoa markets; (2) livelihood risks remain significant as higher cocoa prices are structurally volatile; (3) price peaks occur as part of long-term production cycles, suggesting that significant price drops are likely in the medium-term. Price-scheme analysis is also particularly relevant if we consider shifts in cocoa-marketing structures driven by new regulations from the European Union (EU). The EU Deforestation Regulation (EUDR) and the EU Corporate Sustainability Due Diligence Directive (CSDDD), in particular, are pushing for first-mile traceability and human rights due diligence in cocoa procurement and supply chains. While the price effects of these regulatory changes have yet to unfold, particularly given the evolving regulatory landscape, they are anticipated to significantly influence both local and international pricing dynamics for cocoa and cocoa products. In light of these considerations, the time is especially ripe for a review of pricing schemes that weave together private arrangements at the firm and value chain level and public policy options. The following three subsections summarize key takeaways from the analysis presented in this report.

What pricing schemes are available at the firm and value chain level?

At the firm and value chain level, a key requirement of any strategy to promote farmgate prices is that the supply chain can actually be linked to the farmgate. This highlights the prerequisite of so-called direct value chains, in which producers and their approximate production volumes are known, as opposed to indirect value chains which typically involve the buying and selling of cocoa from unknown producers. This key prerequisite is a difficult one, as still less than half of global cocoa stems from direct/traceable supply chains. However, the share of cocoa originating from direct value chains is likely going to rise due to the increased traceability requirements of recent EU regulatory efforts as well as changing market demands.

Within direct supply chains, strategies to pursue various sustainability goals have diversified in recent decades. Third-party certification in connection with labels such as Fairtrade, Organic, or Rainforest Alliance remains an important governance strategy – often in combination with actors in the so-called solidarity economy, including cooperatives and other farmer-owned producer organizations. Today, however, third-party certified cocoa faces significant competition from firm-owned corporate sustainability programmes. In addition, yet another strategy has emerged in recent years, particularly in the fine flavour segment: as terroir and traceability have become more valued among specialty chocolatiers, many have embarked on journeys to source directly from cooperatives and even single producers in origin countries, circumventing traders and exporters in a strategy that is often referred to as direct trade. Finally, a growing number of entrepreneurs and companies view helping to solve sustainability challenges in the cocoa sector as a necessary part of their business models. With a hybrid objective in mind – i.e. running a business and solving social or environmental issues – these social entrepreneurs showcase a variety of innovative approaches to sourcing cocoa more sustainably.

The diversification of governance strategies is accompanied by a diversification of pricing mechanisms, with each strategy emphasizing its own approaches to price and remuneration at the firm and value chain level. Third-party certifications typically operate with fixed or market-based premiums added to the international market price, which is paid to producers in exchange for compliance with a set of social, environmental, and quality standards – often alongside a mix of technical assistance and training offered by the producer organization. One interesting particularity is that of Fairtrade certification that sets a minimum price based loosely on the living income reference price (LIRP). A similar mix of mechanisms is typically applied by corporate sustainability programmes: market prices with a market-based premium set by the firm and a basket of services offered to affiliated producers in exchange for the delivery of goods meeting requirements defined by the firm.

The picture becomes even more diverse in **direct trade and social entrepreneurship**. The two strategies employ a wide, partly overlapping variety of pricing schemes. The long-term, personal relationships inherent in these strategies and mutual interest in each other's survival enable a range of pricing innovations that are only possible in such a cooperative setting. **Innovative instruments associated with these strategies include pre-finance, long-term and cost-based pricing, revenue and surplus sharing, and other voluntary payments with the goal of strengthening farmers' incomes.** While strategies like these remain largely confined to market niches, the corresponding businesses are fertile testing ground for pricing innovations, facilitating the application and mainstreaming of innovative practices in markets beyond the niche.

What public pricing schemes are implemented in regulated cocoa markets, and how can we address their shortcomings?

At the macro level, producer-country governments in regulated cocoa markets implement different public pricing schemes with the stated objective of stabilizing and supporting cocoa farmgate prices.

Ghana and Côte d'Ivoire use **forward sales and the auctioning of export licenses** to fix farmgate prices based on the revenue generated from forward transactions. Unlike private-sector schemes, which are selective, the system in Ghana and Côte d'Ivoire is sector-wide, providing price stability throughout the season for millions of farmers. This forward sale strategy ties farmgate prices to the international benchmark prices from the previous season.

The **Living Income Differential (LID)** policy goes beyond forward sales and the auction of export licenses in a direct effort to *support* farmgate prices by adding a fixed premium to the export price. However, it still ties farmgate prices to the previous season's international benchmark prices.

Forward sales and the LID scheme keep farmgate prices tied to international benchmark prices determined by derivatives markets. An alternative approach is to shift to a legally enforced cost-plus model, as tested in other settings. The French "EGalim" legislation experiment offers valuable insights into using legal levers to steer the process of price formation towards a cost-plus model, while also pointing to the onerous complexities and rigidities involved.

All these regulatory approaches face significant implementation challenges and trade-offs.

Forward sale strategies tie farmgate prices to the international benchmark prices from the previous season. While this approach can effectively stabilize prices, it may lead to lost sales revenue if prices unexpectedly increase. The relevant economic question is how much farmers are willing to sacrifice to secure a fixed price throughout the season. To address these trade-offs, a pricing adjustment mechanism could be included in forward contracts and export licenses, allowing for price reviews in the event of significant price spikes.

Across public pricing schemes, there are several transparency gaps regarding farmgate price determination as well as the transparency and efficiency of cocoa tax revenue spending. Methods for calculating price benchmarks can become distributional and political, and price fixing typically gives rise to rent-seeking risks. Some of these challenges could be addressed by linking public pricing

schemes with strict transparency and accountability requirements. Insights can be drawn from administrative pricing and contract transparency mechanisms used in the extractive sector while accounting for differences in resource ownership and materiality thresholds.

Without supply management measures that are grounded in sustainability criteria, LID-style measures may unintentionally promote supply expansion. This could exacerbate current issues such as child labour and deforestation, leading to oversupply in the mid-to-long term. Given the shortfalls of traditional, standalone supply-management schemes, it is crucial to explore innovative forms of supply management that build on and harness ongoing regulatory developments. One option is to integrate supply management with land and conservation policies while harnessing climate finance and EUDR compliance mechanisms.

Finally, public pricing schemes typically struggle with the **challenge of specificity and adaptability**. As highlighted in this report, the relationship between prices, living income, and sustainability is complex and non-linear, involving intricate feedback loops and potential disruptions in impact pathways. Pricing and premium strategies must be customized to support those in greatest need and to respond to a wide range of business circumstances. However, public schemes are typically designed to be stable and predictable, making them difficult to adapt. Efforts to tailor these schemes often lead to lengthy and complicated rules that fail to effectively reach their intended targets. One way to address these shortcomings is to work more creatively with the interplay between private and public regulation, as discussed in the concluding section of this report. In particular, regulatory disclosure can be linked with collaborative efforts in supply chains, grounded in principles of knowledge sharing and cooperation, within a supportive regulatory environment.

What regulatory levers can be used by cocoa-importing countries to promote the living income of cocoa farmers?

Focusing solely on producing countries is insufficient. In a competitive global context, international buyers can shift their cocoa sourcing away from producing countries that require payment of living income differentials. This underscores the fact that price-related initiatives in producing countries are likely to fail unless they receive support from downstream industry players, such as traders, processors, manufacturers, and retailers in major consuming countries. However, particularly in the bulk market segment, business dynamics compel these downstream industry players to buy cocoa at the lowest possible cost, reinforcing unsustainable purchasing practices. In this context, consumer-country regulatory intervention may be an important lever to realign business incentives towards more sustainable sourcing practices.

In consuming countries, there is growing debate about changing framework rules to prevent the reproduction of unfair pricing patterns and create opportunities for scaling up pricing schemes explicitly or implicitly aimed at living incomes for farmers. This requires consideration of **transformative legal reforms that address key levers and enablers**.

There is increasing support for **due diligence laws** as a means to establish sustainable value chains that provide farmers with living incomes. This approach holds **significant potential if it includes a legal obligation not to undermine living income initiatives implemented by producing countries**. Broader due diligence requirements to implement living income prices throughout the supply chain would confront practical and legal challenges regarding supply relationships, price parameters, and remedies.

Civil society organizations and cocoa farmers are urging policymakers in consuming countries to include a prohibition against purchasing commodities below the costs of sustainable production in their unfair trading practices (UTP) laws. Introducing a ban on such purchases would serve as an important legal lever to shift the price determination process towards a cost-plus model. Additionally, it would help counteract the tendency to pass the costs of compliance – e.g. with the EUDR, CSDDD, and other sustainability requirements – disproportionately onto farmers. However, enforcement of such a prohibition raises questions about legal standing, agency, and remedial action.

More complex questions remain, such as how to mitigate the price pressures that retailers in consuming countries exert on their suppliers – pressures that have cascading effects throughout supply chains, up to and including farmers in producing countries. **Mandatory contract mechanisms**, such as prohibiting retailers from negotiating the part of a supplier's cost estimate that corresponds to the raw material content of food items, present significant potential for breakthroughs. However, these mechanisms are fraught with complexities related to their design and implementation.

A pertinent question is whether these regulatory mechanisms could have been designed and implemented more efficiently if they were developed more collaboratively with industry stakeholders. Again, this invites consideration of more inclusive, delegated forms of regulation that weave together public and private rules while addressing risks of regulatory capture. In this context, a key regulatory issue is ensuring that competition law supports, rather than hinders, coordinated industry approaches aimed at fostering sustainable procurement and living income-oriented prices. This requires a clear safe harbour under competition law for coordinated purchases aimed at supporting living incomes.

Regulatory arbitrage and competitiveness are significant issues here. Traders and processors located in countries with stricter supply chain standards may find themselves at a competitive disadvantage compared to companies based in countries with more lenient regulations. This situation creates an incentive for relocation of operations to more lax jurisdictions. To address these challenges, unilateral regulatory schemes should aim to leverage transnational networks and promote industry-wide self-regulation that spans across jurisdictions. Ultimately, the effectiveness of these efforts will depend on whether industry stakeholders' motivations and incentives to converge on standards are greater than their desire to exploit opportunities for regulatory arbitrage as well as unsustainable profits.

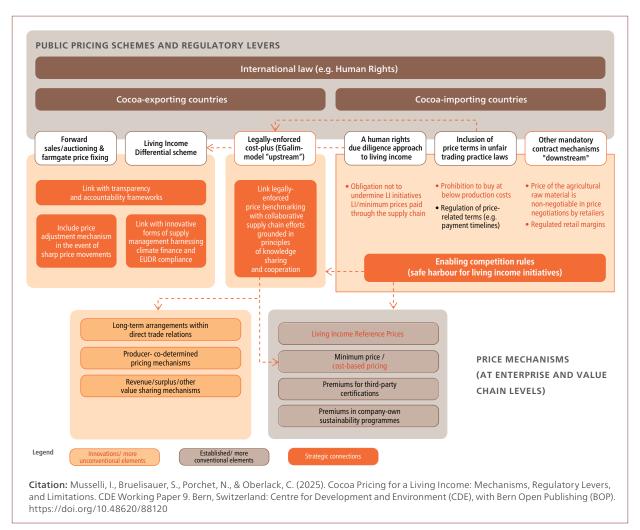


Figure 1: Living income-related pricing schemes, regulatory levers, and strategic connections with innovative legal and institutional frameworks.

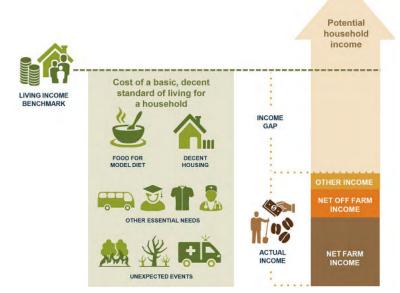
1 Introduction

1.1 Purpose and scope of the study

The concept of living income (Box 1) has gained traction in recent years, evolving from a niche idea to a mainstream priority in the cocoa sector.

Box 1: Living income

Living income refers to the net annual income needed for a household in a specific location to provide a decent standard of living for all members (Living Income Community of Practice, n.d.). This includes expenses for food, housing, education, healthcare, as well as other essential needs such as transportation, communication, and clothing, together with an allowance for unforeseen events. The living income exceeds national poverty thresholds and aims to serve as a pathway to achieving a more prosperity-oriented income. Detailed guidelines and methodologies are available to calculate living income benchmarks in the cocoa sector (Living Income Community of Practice, n.d.; van der Haar et al., 2024). Living income benchmark studies have been published for cocoa-producing regions in Ghana (Anker and Anker, 2022; Ghana COCOBOD et al., 2024; Smith and Sarpong, 2018), Côte d'Ivoire (Ivorian Center for Socio Economic Research, 2018; Prates et al., 2020), and Peru (Andersen et al., 2022). The living income gap reflects the disparity between actual household income and the relevant living income benchmark.



 $Source: Living\ Income\ Community\ of\ Practice,\ https://www.living-income.com/tools-resources/living-income-graphics$

Prices are one important lever to promote living income, next to other factors such as viable farm sizes, yields, purchasing practices, and diversified income sources (Swiss Platform for Sustainable Cocoa, 2024; Waarts et al., 2021). Income and pricing schemes aimed implicitly or explicitly at closing the living income gap for cocoa-farming communities have been part and parcel of more diversified sustainability and sourcing strategies in the cocoa sector (Brülisauer et al., Forthcoming). The main strategies associated with this type of private sustainability governance include third-party certification schemes (e.g. Fairtrade, Rainforest Alliance), company-owned programmes and direct sourcing models (e.g. Lindt & Sprüngli's Farming Programme or Max Felchlin's Fair Direct Cacao model), producer organizations structured as cooperatives or other solidarity economy models, direct trade models, and various social entrepreneurship strategies. At the same time, recent years also witnessed new public sector approaches to support and stabilize cocoa farmers' incomes.

This report seeks to provide a deeper understanding of pricing schemes aimed at a living income in the context of private-sector efforts to promote sustainability in the cocoa industry. It weaves the company (micro) and value chain (meso) levels together with the regulatory framework (macro) level. This integration is critical as it allows for consideration of how structural changes in rules and actornetwork structures can support the scaling up of innovations aimed at living incomes for cocoa producers. In so doing, this report addresses the prerequisites, barriers to effectiveness, and limitations of pricing strategies designed to achieve a living income. It also explores potential solutions to overcome some of these challenges.

The analysis is structured as follows. We begin by presenting the background of the cocoa-sector situation, discussing the need for improved farmgate prices to enhance farmers' livelihoods and address sustainability issues related to cocoa farming (Chapter 2). This chapter critically examines the key terms and underlying assumptions of the mainstream narrative, acknowledging the complexity of the price-income-sustainability nexus.

Next, we systematize the pricing schemes aimed at contributing to the (living) incomes of cocoa and coffee producers (Chapter 3). This overview shows the nature, similarities, and differences of these pricing schemes within the context of private sector strategies for sustainability governance in cocoa supply chains.

We then connect the analysis to regulatory innovations at the macro level (Chapter 4). In producing countries with regulated markets, this includes linking public pricing schemes with transparency and accountability requirements, innovative approaches to supply management, and multi-stakeholder governance processes. In consuming countries, we explore transformative policy reforms to halt unfair pricing patterns and create opportunities for scaling up sustainability innovations. This involves examining legal reforms and developments in key leverage areas, including contracts, corporate due diligence, and competition laws.

To conclude (Chapter 5), we combine and cross-fertilize insights from the micro/meso analysis of private-sector innovations (Chapter 3) and the assessment of regulatory frameworks (Chapter 4), situating the pricing discussion in the smart-mix approach to fostering living income.

1.2 Methodology

The report combines a desk review of the relevant academic and policy literature with a survey and qualitative research.

In Chapter 3, we draw on primary data collected in a survey conducted as part of the COMPASS research project at the Centre for Development and Environment (CDE), University of Bern, in collaboration with the Alliance of Bioversity and CIAT, Peru. The survey systematized private sector strategies and instruments of sustainability governance in cocoa and coffee value chains. It was conducted with 112 companies and producer organizations in Switzerland and Peru between March 2022 and July 2023. Here, we draw on the survey's chapter on price models and their hypothesized effects on producer well-being. Data were analysed to elicit consistent, recurrent patterns of price mechanisms by sustainability strategy. The results refer to both cocoa and coffee sectors.

In Chapter 4, our assessment builds on a multi-year scoping review of regulatory levers and enablers for sustainability transitions in commodity chains implemented in the context of different CDE projects. The analysis was complemented with participatory observation at the 2024 World Cocoa Conference in Brussels and exchanges within a sounding group of experts.

The analysis in Chapter 5 links with socio-legal studies on the governance of price regulation, enriched with insights from participatory observation at the 2024 World Cocoa Conference in Brussels.

2 Setting the stage: The issue of farmgate prices

Cocoa prices skyrocketed in 2024, reaching historic highs of over USD 11,000 per metric ton in 2024 (https://www.icco.org/statistics/, n.d.). In the face of supply tightness, cocoa prices are likely to remain high. The question arises: In light of the soaring prices of cocoa beans, should we still discuss the need for sustained and stable farmgate prices? The answer is unequivocally "Yes". There are several reasons for this. First, high market prices have not necessarily resulted in high "farmgate prices" - the prices paid to farmers. As discussed below, currently an estimated 80% of farming families do not earn a living income, despite international market prices reaching historic highs. This discrepancy is particularly evident in regulated markets, where farmgate prices are fixed in advance for the entire season. Also, in environments without fixed prices, first-level sourcing companies and particularly producer organizations sell most of their harvest in advance and thereby fix selling prices for the season. In 2024, many of them struggled to keep paying competitive prices and, as a result, corresponding producers did not benefit from the market price surge. Second, average price levels and peaks show only part of the picture. Cocoa prices continue to exhibit high volatility, undermining the stability needed for improved livelihoods. Price stability is crucial for farmers to plan and invest in their operations. Third, the current situation of high prices is occurring within the context of long-term cycles of low and high prices. Cocoa supply is highly price-inelastic due to the long interval between planting and harvesting. If prices remain sustained, there will be some impact on demand, or supply will expand in the medium term, considering that newly planted cocoa trees typically reach productive age about three years after planting. Eventually, we may witness a new long-term cycle of low cocoa prices.

This section establishes the background for the following analyses. It discusses the need for improved farmgate prices, particularly in regulated cocoa markets, the complexity of the price-income-sustainability nexus, and ongoing regulatory developments that foreground pricing issues.

Poverty is still widespread among cocoa farmers. By some estimates, there are about 5–6 million cocoa farming families globally, which translates into roughly 40–50 million individuals who rely on cocoa for their livelihood, deriving their income either from growing/selling the crop or working on cocoa farms (CacaoNet, n.d.; Waarts and Kiewisch, 2021, p. 6). An estimated 80% of cocoa farming families do not earn enough income for a decent living (Swiss Platform for Sustainable Cocoa, 2024, p. 1), thus falling short of a living income. In Côte d'Ivoire and Ghana, 30–58% of households earn a gross income below the World Bank extreme poverty line and 73–91% of households do not earn a living income (van Vliet et al., 2021; Waarts and Kiewisch, 2021). This is in line with more recent estimates (Ghana COCOBOD et al., 2024), as described in Box 2.

Box 2: Living income gap of cocoa-farming families in Ghana

According to a study by SWISSCO, the Ghana Cocoa Board (COCOBOD) and the Research Institute of Organic Agriculture (FiBL), cocoa farmers in Ghana earned an average annual income of Ghanaian Cedi GHS 24,814 (about USD 2,021) in 2024; 91% of the surveyed households earn below the adjusted Living Income Benchmark of GHS 52,970 (USD 4,315). Despite an increase in the farmgate price, cocoa prices remain too low to sustain a living income. As of April 2024, the estimated LIRP at the farmgate level was GHS 51.29 per kilogram for cocoa. The actual farmgate price was initially raised to GHS 33.12 (USD 2.50) per kilogram in April 2024 and then further increased to GHS 48.00 per kilogram (USD 3.10) in September 2024. To meet the LIRP and achieve a living income, the farmgate price would need to increase by an additional 30%.

Source: Joint study by SWISSCO, the Ghana COCOBOD, FiBL (Ghana COCOBOD et al., 2024). The study surveyed 600 farming households based on 2022/2023 yield levels. Note: USD values reflect wide GHS-to-USD exchange rate movements.

The issue of low farmgate prices and poverty in cocoa-producing areas is closely connected to how value is distributed along the global cocoa chain. An estimated 70% of the total value of final consumer goods and 90% of the total margins in the cocoa chain go to intermediaries, brands, and retailers – i.e. actors downstream in the value chain (FAO and BASIC, 2020; Fountain and Huetz-Adams, 2022, 2020, 2015; Gilbert, 2006; Gneiting and Arhin, 2023; Grumiller and Grohs, 2022). Only 18.6% of the total value and less than 7.5% of the total margin are earned by stakeholders in cocoa-producing countries, including cocoa farmers and exporters (FAO and BASIC, 2020, p. 5). While no reliable figures are available yet regarding the value share accruing to producers as a result of the recent price spike, anecdotal evidence suggests that supply scarcity has enhanced the bargaining power of farmers and cooperatives in certain situations, improving their value share. However, the structural conditions of the international cocoa market that induced the status-quo-ante situation of low value capture and farmgate prices remain unchanged.

Price transmission dynamics in producing countries are also critical, particularly in regulated cocoa markets. In producing countries, the pass-through of improved prices from the point of export to farmgate is neither automatic nor straightforward (Musselli, 2017, pp. 35–37). National exporters, bureaucracies, and middlepersons may capture most of the price increase – reflecting information asymmetry and unequal bargaining power in the domestic marketing chain. The problem is particularly evident in regulated cocoa markets (Ghana and Côte d'Ivoire), where farmgate prices are tied to the previous year's market prices. Additionally, farmers receive heavily discounted prices due to government deductions (see section 4.2).

Against this background, increasing farmgate prices is a crucial strategy for reducing poverty in cocoa-producing areas, especially in regulated markets. The hypothesized underlying impact pathway posits that higher cocoa bean prices will increase farmers' incomes. Income gains will, in turn, mitigate other major sustainability issues associated with cocoa farming, such as the high incidence of child labour in the cocoa sector and ongoing clearance of forests. Indeed, cocoa sales are essential for household income in these areas. According to some estimates, farmers in rural Ghana and Côte d'Ivoire earn an average 80–90% of their total cash income from cocoa (Waarts and Kiewisch, 2021, p. 21). In these contexts, stabilizing and increasing farmgate prices is the most direct way to improve livelihoods in the short run and at scale (Fountain, 2023; Swiss Platform for Sustainable Cocoa, 2024; Waarts and Kiewisch, 2021, p. 32) (see also section 4.2). An external impact assessment of a project involving 134 cocoa-growing households in Côte d'Ivoire shows that the payment of the LIRP led to a 31% increase in household income, an increase in revenue from cocoa by 38%, and improved production per hectare by nearly 20% (IDH, n.d.).

Yet, price and premium approaches are not "a one-stop shop" for solving rural poverty (Waarts & Kiewisch, 2021, p. 35). The living income gap is so large that even substantial price increases will not fully close the gap for most farmers, although they may improve livelihoods to a significant extent (Box 3).

Box 3: The size of the living income challenge

The magnitude of the living income challenge is daunting. For example, in Ghana and Côte d'Ivoire combined, up to two million smallholder farmers produce cocoa (Waarts and Kiewisch, 2021, pp. 4–5). According to some estimates, the income gap between these cocoa farmers' average income and recent living income benchmarks amounts to about USD 5.21 billion per year (Kiewisch and Waarts, 2020, p. 4; Waarts and Kiewisch, 2021, p. 8). This amount is roughly equivalent to the total combined earnings from cocoa bean exports of Ghana and Côte d'Ivoire in 2018 and is approximately forty times the 2020 cocoa-related net earnings of Mondelēz International, one of the world's largest manufacturers of chocolate products (Kiewisch and Waarts, 2020, p. 4; Waarts and Kiewisch, 2021, p. 8). Further, if the amount of USD 5.21 billion was hypothetically distributed as a uniform pricing premium in Ghana and Côte d'Ivoire, it would still only enable 30–40% of farming households to achieve a living income. In other words, the overall value generated by Ghana and Côte d'Ivoire's cocoa-chocolate value chains *must be increased* in order to make it possible for all the cocoa producers who supply these value chains to earn a living income (ibid).

Note also that cocoa income, calculated as price multiplied by volume, relies as much on sales volume as price levels. High cocoa prices without sufficient sales volume will not significantly contribute to achieving a living income. Additionally, when price incentives come with increased production costs associated with sustainability requirements, the net benefits remain to be assessed.

More generally, the relationship between prices, living income, and sustainability is complex and non-linear, involving intricate feedback loops and unintended effects, as outlined in Table 1.

Table 1: Prices, income, and sustainability: Feedback loops and unintended effects

Value capturing in price instruments	Minimum prices and price premiums generate a margin in the value chain. Some actors will take it. Options are needed to ensure that the margin is obtained by producers rather than intermediaries.
Oversupply and downward price pressure	In a competitive market, an increase in farmgate prices in major supply countries would likely encourage farmers to expand production. In turn, increased supply from major producing countries may lower international prices, adversely affecting cocoa farmers in other regions (Aidenvironment & Sustainable Food Lab, 2018; Boysen et al., 2023; Waarts & Kiewisch, 2021).
Child labour and deforestation risks	The incentive to expand production also carries the risk of additional child labour and deforestation (Boysen et al., 2023; Habraken et al., 2023). Some research results suggest that mainstream income-enhancing strategies, such as intensification of cocoa production and diversification of income sources, may unintentionally contribute to the increased prevalence of hazardous child labour, potentially by raising households' demand for labour (Habraken et al., 2023, p. 2).
Distributional aspects and inequalities	Ultimately, when assessing the pro-poor impacts of living income prices for co-coa producers, we should consider the questions: Who is the "producer"? And whose living income is being considered?
	There is an unequal distribution of land and sales volume among cocoa farmers. As a result, higher prices and premiums will disproportionately benefit the top-performing farmers with the highest cocoa sales. For example, it was calculated that about 50% of all income earned from cocoa sales in Gahan goes to the top 12% of producers, who are usually the largest landholders or the most efficient farming families – often headed by men (Waarts & Kiewisch, 2021, pp. 14–16).
	This links to the overall challenge of farmer heterogeneity : inside the same community/cooperative, there can be fiftyfold differences between farmers in terms of wealth and revenue. The perceived needs of farmers in different positions can vary significantly.
	There are significant gender inequality issues, as cocoa farm managers are typically men, and women-headed households tend to have a smaller land size available (Kuhn et al., 2023; Maeder et al., 2024).
	Another related issue is the variability of sharecropping arrangements that determine the distribution of crop proceeds between the landowner, who owns the farm, and the sharecropper, who farms it. Under some arrangements, the sharecropper keeps one third of the crop proceeds, while the landowner keeps two thirds (Asamoah and Ansah, 2017).
Trade diversion	International traders and manufacturers may adjust their sourcing strategies to avoid countries that require payment of living income differentials (Boysen et al., 2023). Further, due diligence laws and strict sustainability requirements may trigger trade diversions away from the importing countries that apply them, as producer countries and exporters seek less-stringent markets for their products.
Overdependence	Focusing solely on higher prices and LID could lead farmers to become overly dependent on cocoa production, though diversification away from cocoa is a key poverty-reduction strategy (Oomes et al., 2016). At the macro level, over-dependency and cocoa-centric measures can accelerate and amplify boom and bust cycles, exacerbating instability and deepening poverty among farmers in periods of very low cocoa prices (Kiewisch & Waarts, 2020, pp. 8–9).

To mitigate these risks, which primarily stem from poverty rather than price incentives themselves, price and premium strategies could integrate some form of supply management, factor in sustainability criteria, be sufficiently targeted to support those in greatest need, and involve coordination and backing from the industry in both producing and consuming countries. Innovative forms of supply management are needed, as past experiences with supply management through global buffer stocks and supply quotas have not been effective in the long run (refer to section 4.1).

In this context, it is also important to consider regulatory developments that emphasize pricing issues. When it comes to living income strategies, private sector innovations and regulatory developments are increasingly intertwined. Trade regulations and supply chain laws, such as the EUDR and the CSDDD, already include requirements that may limit the discretion of traders and manufacturers regarding living income initiatives.

The EUDR requires cocoa to be traceable to the specific plots of land from which it was harvested, and to segregate EUDR-compliant from non-EUDR-compliant cocoa. Such traceability and segregation involve a transition from indirect to direct supply chains, setting the condition for firm- and value chain-level initiatives aimed at promoting a living income for farmers. These requirements incur significant costs, which may be passed on to producers to varying extents. The key question is whether EUDR-compliant cocoa will command a price differential that offsets these costs; if not, the incentive to divert supplies to less-demanding markets will be strong.

Going one step further, the CSDDD – if implemented as initially conceived and adopted – would hold companies responsible for using their influence to ensure an adequate standard of living throughout their supply chains. This legal obligation could significantly impact pricing mechanisms, potentially transforming moral claims into legal rights. At minimum, it would legally require relevant cocoa trading and processing companies not to undermine good-faith efforts by cocoa-producing countries to secure a living income for cocoa farmers. Note, however, that the CSDDD is currently being revised and it could be significantly weakened as regards key provisions (Box 4).

Box 4: EU CSDDD and the EUDR

The EUDR entered into force on 29 June 2023 and will become operational in December 2025. Under the new regulation, any company that places commodities such as cattle, wood, cocoa, soy, palm oil, coffee, rubber, or relevant commodity-derived products (e.g. leather, chocolate, tyres, or furniture) on the EU market must be able to prove that the products do not originate from recently deforested land and have not contributed to forest degradation. The EUDR requires operators and traders that are not SMEs placing covered products on the EU market to collect geographic coordinates of the plots of land where the commodities were produced. Relevant commodities cannot be made available on the EU market unless they have been produced in accordance with the relevant legislation of the country of production.

The CSDDD entered into force on 25 July 2024. If implemented as initially conceived, EU Member States would have to transpose the Directive into national law by 26 July 2026. The rules would start to apply one year later, with full application on 26 July 2029, according to a staggered approach. The original CSDDD was far-reaching. Covered companies were required to identify and address potential and actual adverse human rights and environmental impacts across their entire supply chains, beyond their direct operations. Enforcement mechanisms were stringent, including an EU-wide civil liability provision of overriding mandatory nature, with the obligation to provide representative mechanisms for victims (allowing NGOs to bring a case on their behalf). This was coupled with dissuasive administrative sanctions for infringement based on a company's global turnover. Companies in scope were large EU limited liability companies and partnerships (>1,000 employees and >EUR 450 million turnover [net] worldwide) and large non-EU companies (>EUR 450 million turnover [net] in EU). Note that the CSDDD is currently undergoing revisions as part of the "omnibus" package, which includes amendments to the CSDDD. If these amendments are approved, due diligence obligations will apply only to Tier 1 suppliers. Regarding the civil liability framework, the reform will remove $\hbox{EU-wide civil liability provisions, eliminate the overriding mandatory provision, and with draw}\\$ the requirement for representative mechanisms. Additionally, with respect to administrative enforcement provisions, penalties will no longer be based on a company's global turnover.

To sum up

Price and premium approaches offer the most direct way to improve livelihoods in the short run and at scale, although they are not a one-stop solution to rural poverty. They come with risks and unexpected consequences, such as the potential for oversupply, which calls for flanking supply-side measures and built-in sustainability conditions. The discretion of companies to either support or undermine living income schemes is somewhat constrained by an increasingly complex web of supply chain laws, which entangle private sector innovations and regulatory developments. With these considerations in mind, we shall now turn to considering the design, implementation challenges, and upscaling opportunities of pricing schemes targeted at living incomes.

CDE WORKING PAPER 9 | Cocoa Pricing for a Living Income: Mechanisms, Regulatory Levers, and Limitations

3 Pricing models at enterprise and value chain levels

Almost all cocoa is bought or sold at some point at a price that references the international market price, typically indexed according to prices for cocoa futures contracts as traded in New York and London.¹ This means that, when making a sale or purchase contract, the parties involved (e.g. a cocoa exporter and an international trader/grinder) specify the amount of cocoa to be delivered, the futures contract that will be used to determine the delivery price, and a premium or discount that is negotiated based on the future price. Although the price is adjusted based on factors such as origin, quality, or contract terms, the basis is generally the price of cocoa futures (Oomes et al., 2016, p. 31) (Hütz-Adams and Schneeweiß, 2018). The negotiated premium/discount reflects market factors (adjustments for origin, quality, and specific contract terms), but also the relative bargaining power of the exporter vis-à-vis the international buyer.

In "regulated" cocoa markets, these international exchange prices still serve as a reference point for regulators to determine how much to pay cocoa farmers at farmgate. The living income differential (LID) scheme in Cote d'Ivoire and Ghana adds a fixed premium to the export price, which is benchmarked against ICE EU Terminal prices. In Ghana, forward cocoa sales are similarly based on international price benchmarks.

Other exporting countries do not currently intervene actively in price setting. In such "unregulated" markets, the cocoa exporter typically sets the selling (export) price with the buyer based on the futures price plus a negotiated premium or discount. In most cases, the exporters are national or international companies that frequently source from different suppliers, ranging from national to local traders or cooperatives. In an often highly competitive setting, they set their own purchase prices by deducting their estimated operating costs – including expenses like transport, salaries, warehousing, fobbing charges, etc. – from their export price. In some cases, exporters also purchase cocoa directly from farmers. This may be from independent (and unknown) farmers, where they compete with local traders (indirect sourcing) or from a group of affiliated farmers to whom they may provide services in exchange for loyalty, competing with cooperatives (direct sourcing; zu Ermgassen et al. 2022). Often, exporters operate such programmes also as a third-party provider for a large client, in which case the costs are typically integrated into the purchasing price.

The price finally paid to the farmer, the farmgate price, is set by the first-level buyer – whether a local trader, a cooperative, or an exporter – which deducts its own costs for marketing, including services to producers, from its own received market price. Particularly in indirect supply chains, farmgate prices are highly dependent on competition between first-level buyers who are located within a reasonable geographic distance to farmers. In more remote locations, local traders are often the price setters vis-à-vis farmers – with the latter tending to have very limited bargaining power, also due to their lack of alternative income sources. In this context, asymmetries in bargaining power do not impact the choice of the reference price or its formation (unless futures markets are distorted). However, information asymmetries and power imbalances may have a significant bearing on negotiated premiums and discounts relative to future prices, on netback adjustments for marketing/processing costs, and other deductions imposed on suppliers and, ultimately, farmers.

Exporters and producer organizations who maintain direct supply chains with affiliated producers typically compete on a more long-term basis for groups of geographically concentrated producers. Prices are usually relatively uniform, at least across groups. The buyer–producer relationship is often based on package deals that include services and other benefits provided by the buyer to producers in exchange for their commitment to sell their produce. In return, these producers typically agree to meet higher quality and sustainability standards set by their buyers. Only in such direct supply chains

¹ They are based on exchange prices of cocoa "futures" on the London NYSE-LIFFE and the New York ICE cocoa futures markets (Oomes et al., 2016 pp. 30–32). The price of a cocoa future is "the price for a financial contract involving the forward delivery of a specific quantity of cocoa" (Oomes et al., 2016, p. 30). A futures contract is an agreement to buy or sell an underlying asset in the future at a set price. For cocoa, ICE futures contracts are available for five delivery dates per year (in March, May, July, September, December, with delivery following the final trading days of the contract). In undistorted futures markets, future prices reflect the interplay of demand and supply and play a critical price discovery function for all parties involved in the cocoa supply chain.

can buyers effectively ensure that the price they pay for cocoa actually contributes to improving the income of the farmers. Institutional mechanisms at the micro and meso level, as discussed in this section, are therefore by definition limited to such direct supply chains. To date, most cocoa is sourced from indirect supply chains (zu Ermgassen et al., 2022). However, newly launched traceability requirements, such as in the EUDR, are expected to increase the amount of directly sourced cocoa.

3.1 Sustainability governance strategies and pricing

The sustainability governance of cocoa value chains has significantly diversified in the last two decades. A recent comprehensive survey of 112 cocoa and coffee value chain actors in Switzerland and Peru compared governance instruments in five key strategies of sustainability governance (Brülisauer et al. Forthc.): third-party certification, solidarity economy, corporate sustainability programmes, direct trade, and social entrepreneurship. Each of these strategies demonstrates a unique mix of instruments related to pricing and payment modalities, services, requirements, and other aspects of value chain governance. In this section, we discuss elements related to pricing observed in each of these strategies. The identified pricing mechanisms are in turn discussed in greater detail in the subsequent section (3.2).

Third-party certification remains a dominant sustainability strategy, with 81 organizations (72% of participants in our research; Brülisauer et al. Forthc.) reporting using it in at least a small share of their supply chain. Here, the pricing model typically adopts the *global commodity price in London or New York as a basis, often for country and quality premiums along with a premium for certified cocoa.* Additionally, Fairtrade certification incorporates a minimum price as an additional element. Price premiums are paid for different attributes of cocoa, such as organically produced; Fairtrade; from womenled enterprises or indigenous communities; and climate-neutral or -positive.

Solidarity economy strategies (29% in our sample) were primarily pursued by producer organizations such as cooperatives, which are often certified. Correspondingly, these strategies also partly rely on the price elements of certification (global commodity exchange price, plus sustainability premiums and quality premiums). Additionally, several producer organizations reported *sharing surpluses with their producer members*, including *multiple payments across the year* (e.g. a premium at the end of the year), and some provided specific *premiums for women-led cocoa production*.

Company-owned programmes were part of sustainability strategies of 23 organizations (21%) in our sample. In these schemes, similar to certification, price elements begin with the *global commodity exchange price* and add *variable sustainability premiums* and *quality premiums*. One typical difference to certification is that sustainability premiums are determined by the programme-leading company rather than a third-party standard-setting organization. Further, income accelerator programmes have introduced *cash transfers* to producers, which are conditional on producer participation and less on cocoa quantity.

Downstream companies with **direct trade strategies** (23% in our sample) used more diverse price models. Notably, the price elements of certification or company-owned programmes are not usually associated with direct trade strategies. Outstanding price elements reported by direct traders included revenue sharing (i.e. downstream company pays a share of their own chocolate revenue to cocoa producers), *living income reference prices* (i.e. downstream company uses a price benchmark that would allow an average producer in a sourcing region to achieve a living income), and *long-term fixed prices* (i.e. downstream company commits to paying stable prices over multiple years to the affiliated producer organization or producers).

Social entrepreneurship strategies were prevalent among 38% of our research participants. The price elements differed quite strongly between enterprises; only *quality premiums* were a consistent element under this strategy. Specific price elements that were mostly or only observed under social entrepreneurship strategies included *revenue sharing; long-term fixed prices; needs-based pricing* (downstream company considers producer's statements on needs in price model); *voluntary additional payments* and a *commitment to annual increases of prices*.

3.2 Mechanisms for cocoa pricing aimed at living income

Our survey results (Brülisauer et al. Forthc.) identified seven recurrent enterprise- or value chain-level pricing mechanisms that implicitly or explicitly aim at contributing to living incomes among cocoa producers (Table 2).

 Table 2: Seven mechanisms intended to support prices on behalf of living incomes among cocoa producers.

Mechanism	Main features	
Living Income Reference Price (LIRP)	Buyer commitment to pay LIRP. Most explicit in relating the pricing mechanism with living income targets. The LIRP methodology establishes benchmarks for country- or region-specific farmgate prices, which are expected to enable a living income for an average producer family with a viable farm size and yields in a specific cocoa-origin country or subnational region. LIRP methodology can be part of different institutional mechanisms. According to the methodology of Fairtrade International, the LIRP is calculated as:	
	LIRP = Living Income Benchmark – subsistence costs + costs of sustainable production (based on Good Agricultural Practices and investment needs). LIRP must be regularly recalculated to match the changes of the environment such as inflation or energy costs.	
Minimum price in third-party certifications	The price for Fairtrade certified cocoa cannot drop below the so-called Fairtrade Minimum Price, currently set at USD 2,400 per metric tonne. According to Fairtrade, its minimum price is defined through a cost-plus methodology which takes into account the minimum cost of sustainable production according to Fairtrade standards. In practice, the minimum price – just as the Fairtrade premiums – are defined through the multistakeholder body comprising producer organizations and buyer members of Fairtrade. To this day, Fairtrade remains the only third-party certification which employs a minimum price.	
Premiums for third-party certifications	Cocoa producer or producer organization sells cocoa (wet; dry and fermented; or further processed) to buyers (e.g. traders, manufacturers) using a price model that involves a commodity-market price as a base plus certification premium. The commodity-market price determined at the cocoa commodity exchanges in London or New York defines the basis – for specified qualities, quantities, delivery dates, origin countries. The timing of fixing the base price can be done by seller's call or buyer's call. For Fairtradecertified cocoa, a fixed, non-negotiable premium over market price (as well as its minimum price) are defined by the Fairtrade standard organization. Other certifications rely on market-based premiums without a minimum price. The translation of export prices into farmgate prices (incl. services by producer organizations) is conducted in line with the requirements of the respective sustainability standard.	
Premiums in corporate sustainability programmes	Similar to the third-party certified supply chain, with the difference that the price premiums, other benefits, as well as sustainability and quality requirements for obtaining these, are defined by the enterprise owning the sustainability programme. Mostly applies to direct supply chains with high levels of traceability. Often, demand by manufacturers or retailers for "sustainable" cocoa influences the manoeuvring spaces (e.g. specific requirements, budgets) that traders have in managed sustainability programmes.	
Long-term arrangements within direct trade relations	Direct trade relations, defined as purchases by manufacturers directly from producers or producer organizations at origin, are often embedded in long-term trust relationships, in which product specificity and farmers' needs play important roles. These relations may enable alignment of planning, risk and value sharing between buyers and suppliers as they develop a mutual interest in each other's viability. Long-term fixed prices or revenue sharing (see below) are some pricing mechanisms that emerged from direct trade relations.	

Producer-co-determined pricing mechanisms	Different kinds of institutional mechanisms of cocoa producers co-determining prices beyond on-site negotiations at harvest time.		
	 Democratic decision-making about internal pricing within a producer organization, in particular about the translation of export prices into farmgate prices Price-setting committee in a vertically integrated company with producer involvement to determine prices of cocoa, intermediate and final products. 		
Value sharing	Buyer commitment to		
	 (a) revenue sharing: buyer shares a part of the chocolate revenue with cocoa producers; (b) profit/surplus sharing: buyer or producer organization shares a part of its profit or surplus at the end of the year with cocoa producers; or (c) voluntary additional payments to suppliers and producers 		

While market participants may use any of these seven mechanisms in an effort to support living incomes among cocoa producers, they are not without **preconditions and limitations**. For example, **LIRPs** build on living income benchmarks for specific cocoa origin regions, but the regional average does not adequately account for differences and inequalities between producers in a given region. Further, LIRPs build on static measurements of living income benchmarks – data that can become quickly outdated, for example due to local inflation dynamics. Further, methods for calculating price benchmarks have distributional implications that render certain technical assumptions – e.g. in terms of "viable yields" and "viable farm sizes" – contested.

Note also that **contractual terms** play a crucial role in shaping the impact of pricing mechanisms by determining the stability, predictability, and accessibility of income for farmers. **Payment timelines** – whether upfront, staggered, or deferred – directly affect farmers' cash flow and ability to maintain a living income year-round. A **guaranteed minimum price** can provide a safety net against market fluctuations, ensuring that farmers receive at least a baseline farmgate price even when commodity prices drop – but compared to LIRPs, they have not been adequately regionalized to date. **Price adjustment mechanisms**, such as index-based pricing, enable flexibility in response to market dynamics. Additionally, **requirements for farmers to access certain pricing benefits**, such as certification compliance, quality standards, or other internal requirements, influence their ability to benefit from these mechanisms. These contractual features ultimately determine whether pricing mechanisms contribute to long-term financial resilience or perpetuate uncertainty among producers.

3.3 Do price elements differ by company size, age, value chain position, legal status and ownership?

We further analysed our survey data (Brülisauer et al. Forthc.) to assess whether value chain position, company size, company age, legal status, and/or ownership were consistently associated with particular price elements.

Value chain positions: Almost all the enterprises involved in international trade (n=13) in our sample used a combination of global commodity price, sustainability premiums, quality premiums, and minimum prices (under Fairtrade certification). The same combination of price elements was fairly consistently (50–60%) used by companies involved in national trade within Peru, and consistently (60–80%) used by Peruvian exporters. Quality premiums were consistently used throughout all value chain stages. Otherwise, no consistent (>60%) associations were found between price elements and value chain positions.

Company age: The only consistent pattern found here concerns companies established before 1990. Among the 27 organizations in this group, 70–80% employed the "conventional" combination of global commodity price, sustainability premiums, quality premiums, and minimum prices. In addition, quality premiums were consistently used across company-age groups. For all other age group and price elements, no consistent patterns were found, i.e. price elements did not consistently vary by age. Direct trade and social entrepreneurship strategies were more prevalent among younger companies (72% of social entrepreneurship after 2010; 62% after 2010, in our sample).

Company size: The 43 micro and small enterprises in our sample used very diverse price elements – no strong recurrent patterns were evident in this group. However, medium-sized enterprises consistently used the conventional elements of global commodity price, sustainability premiums, quality premiums, and minimum prices (consistency rates of 63–75%). This combination was even more consistently used by the large and very large enterprises (consistency rates of 71–100%). Notably, medium-sized (63%) and very large (67%) enterprises pay the overall payment in multiple instalments, e.g. base price at delivery and premiums later or at the end of the year.

Legal status and ownership: Peruvian producer organizations consistently used the "certification package" of global commodity price, sustainability premiums, quality premiums, and minimum prices (consistency rates of 56–100%). The same package was used by companies owned through public shareholders, parent companies, or individual persons (63–100%).

Overall, we found that the more **conventional price elements** – global commodity price as a base, sustainability premiums, quality premiums, and minimum prices – were associated with certain sizes, ages, value chain positions, legal statuses, and ownership arrangements of companies. The more **unconventional pricing elements** – such as revenue sharing, surplus sharing, living income reference prices, needs- or cost-based pricing – were not consistently associated with age, size, value chain position, legal status or ownership. Instead, unconventional pricing elements were practiced by different kinds of organizations – though mostly as niche innovations in the market, in particular as they were small in number in our sample.

CDE WORKING PAPER 9 | Cocoa Pricing for a Living Income: Mechanisms, Regulatory Levers, and Limitations

4 Venues for upscaling: Public regulation

As introduced in Chapter 3, the pricing mechanisms targeting a living income for cocoa producers primarily focus on the specialities/fine flavour and ethical market segments, though this is not exclusively the case. They are associated with premium products being sold in the high-end segment (high-quality specialty chocolate products) and the middle-end segment (good quality/sustainably certified chocolate) of the chocolate markets. The mass-balance certified cocoa also serves the lower segment, which includes mass-market products from big brands and lower-quality private-label products (Ferro and Groothuis, 2022).

The question arises as to whether these pricing mechanisms are scalable in conventional cocoa markets for bulk cocoa. Bulk cocoa, which mainly consists of the Forastero variety from West Africa, is characterized by high volumes, low value, and standard quality. It caters to the lower-end segment of the chocolate market, providing cheap chocolate products mainly sold in supermarkets. This segment accounts for an estimated 75–85% of chocolate consumption (Ferro and Groothuis, 2022; MordorIntelligence, n.d.).

The widespread adoption of pricing mechanisms aimed at ensuring a living income in the bulk cocoa industry faces various challenges, including behavioural, structural, and legal obstacles. Concerted private efforts to provide better prices to cocoa farmers face collective action problems on both the demand and supply sides. There is always the risk that some buyers may not honour their commitments, whereas suppliers may accept lower prices to increase sales (Aidenvironment and Sustainable Food Lab, 2018, p. 27). This creates a prisoner's dilemma situation, in which all parties stand to benefit from cooperation but are unlikely to do so because of the temptation to free-ride or fears that others may free-ride (Gavrilets, 2015). Further, concerns about violating competition laws may deter companies and industry associations from collaborating to ensure a living income for cocoa farmers.

This challenge is exacerbated by market imperfections and structural issues. On the supply side, cocoa farmers will continue harvesting cocoa despite extremely low prices due to lack of viable livelihood alternatives, the sunk costs associated with tree crops planting, and land use rights tied to cocoa (Aidenvironment and Sustainable Food Lab, 2018, p. 32; Oomes et al., 2016). On the demand side, bulk cocoa trade and processing are low-margin businesses reliant on high volumes, typically associated with standardized fungible commodities. In summary, a combination of self-interest, market dynamics, and regulatory constraints leads to entrenched mainstream pricing models in the cocoa industry, hindering breakthrough innovations.

In this context, regulatory intervention may be necessary to address market imperfections and failures and establish suitable enabling conditions for the upscaling of niche pricing strategies. However, command and control policies designed to correct market dynamics can lead to costly regulatory enforcement, trade diversion, and unintended spillovers (Grabosky, 1995). These policies often struggle with specificity and adaptability, being either too broad and untargeted or overly complex in their attempt at particularization. Accordingly, emphasis should be on regulations that accommodate various business structures and align with ongoing reform efforts that have the potential to drive structural changes.

In this chapter, we will cover the following topics:

Section 4.1 gives a brief overview of the policy instruments utilized in the past to manage prices or the effects of price fluctuations in the cocoa sector. While most of these instruments were discontinued, they offer foundational knowledge on the types of instruments and approaches traditionally used and the reasons for their failure.

In section 4.2, we focus on selected public pricing schemes currently used in producing countries. We examine their limitations and explore how to address them by connecting the schemes with transparency safeguards and new approaches to supply management.

Section 4.3 shifts the focus to consuming countries. Here, we examine changes in "regime" rules (contract, company, and competition laws) that have the potential to weaken the reproduction of unfair pricing patterns and create opportunities for the upscaling of niche innovations – also noting their limitations.

4.1 Stocktaking of past efforts at regulating cocoa prices

Table 6 (Annex) provides a brief overview of the policy instruments used in the past to manage prices or the effects of price fluctuations in the cocoa sector, alongside alternative (non-price related measures). Building on existing compilations (Aidenvironment and Sustainable Food Lab, 2018; Brown and Gibson, 2006; Galtier, 2012; Gayi, 2022; Gilbert, 1987; Musselli, 2017), it includes a matrix that categorizes the different tools and approaches based on the following criteria:

Price type	Farmgate, export and/or international	
Price objectives	Support and/or stabilization	
Approach	Manage prices or manage the effects of price changes	
Type of instrument	Unilateral/domestic, bilateral, regional/plurilateral, multilateral	
Policy tool(s) used	Direct price regulation; supply management/volume-based mechanisms; variable export taxes/buffer funds; state trading; auctioning/stock management; subsidies; insurance/financial mechanisms	

Cocoa has long been the object of concerted price-related actions by producing and consuming countries alike (Gariepy, 1976; Gilbert, 2011, 1996, 1987; Khan, 1982; Musselli, 2017; Reynolds, 1978; ul Haque, 2007). Institutionalized multilateral cooperation in cocoa dates back to 1972, with the first International Cocoa Agreement (ICCA) adopted by the United Nations Conference on Cocoa. Successor agreements were adopted in 1975 (second ICCA), 1980 (third ICCA), 1986 (fourth ICCA), 1993 (fifth ICCA), 2001 (sixth ICCA), and 2010 (seventh ICCA). The first four ICCAs (1972, 1975, 1980, and 1986) included price control mechanisms. The first two ICCAs, in 1972 and 1975, employed an export quota system and a buffer stock arrangement. The third and fourth ICCAs, in 1980 and 1986, entirely relied on buffer stock mechanisms. The ICCA buffer stocks were intended to reduce price fluctuations around a known long-run level. When the price exceeded or fell below a specified range, the manager of the buffer stock tried to restore the reference price by selling or buying on the open market. Production/export quotas required supply management enforcement at the domestic level in producing countries. This was done through export restrictions. Cocoa price intervention was likewise commonplace in domestic markets (for an overview and literature, Musselli, 2017, pp. 39–51 and 72–78).

Over the years, many of these price stabilization (and support) schemes either collapsed or lapsed. At the international level, economic stabilization clauses in the cocoa market have been abandoned since 1993. Governments in several countries have also abandoned state-controlled marketing of commodities. For instance, Nigeria dismantled its marketing boards in 1986, Cameroon abolished its public marketing body in 1990, and Côte d'Ivoire initiated the liberalization process in the mid-1990s (ul Haque, 2007). Ghana was the only country in West Africa where the state maintained a major role in export commodity trade, though its internal market has been liberalized since the early 1990s. Notably, however, Côte d'Ivoire re-regulated its cocoa sector in 2011, establishing a new marketing mechanism involving the forward sale of 70–80% of the following year's crop.

In practice, implementing international commodity agreements has been riddled with major challenges; none have successfully maintained stable prices for prolonged periods (Gilbert, 2011, pp. 21–23; Rowe, 1965, p. 209). Most international commodity agreements failed due to a combination of technical, financial, and political problems (ICCO, 2021). These problems included issues such as inadequate financing, disagreements between countries on quota allocations and price stabilization levels, as well as the non-participation of major producing and consuming countries. While some argue that political constraints were paramount (Rangarajan, 1983), others point to intractable technical issues, including the challenge of addressing long-term or cyclical factors through price interventions (Gilbert, 1996; Wight and Prakash, 2011). Due to the long frequencies involved in tree crop price cycles, buffer stocks require continuous buying or selling for extended periods and can easily run out

of funds or stock. There are also technical challenges in determining the long-term price trend around which to stabilize prices. The available options – such as moving averages, average prices over a base period, or prices based on the cost of production of efficient producers – all present complex methodological issues. Output and export quotas are mainly criticized on efficiency grounds, as they tend to "freeze" production and trade patterns, to the detriment of efficient producers. Major practical problems include difficulties in allocating quotas, an incentive to renege on the part of cartel members, and free-riding by non-members.

Drawing lessons from the past, it is worth exploring more innovative pathways that integrate price regulation into multi-stakeholder collaborative efforts and/or engineer targeted changes in key framework conditions. These pathways are discussed below.

4.2 Reform options: Cocoa exporting countries (regulated markets)

This section briefly discusses the pricing mechanisms currently used in regulated cocoa markets. It addresses mechanisms to stabilize seasonal farmgate prices in Ghana (through forward selling) and in Côte d'Ivoire (via the auction of export licenses), along with the living income differential (LID) scheme. The first two systems – selling forward contracts and auctioning export licenses – aim to stabilize farmgate prices through price fixing. The LID scheme is designed to support farmers' incomes by providing a price premium. All these systems keep farmgate prices tied to the previous season's international benchmark prices. In the following, we briefly present the schemes and explore ways to overcome their shortcomings by integrating them with innovative legal and institutional frameworks and approaches. We then consider the feasibility of alternative approaches decoupled from market price benchmarks, drawing from experiments in scaling up bottom-up pricing in other contexts.

4.2.1 Forward selling and the LID

In both Ghana and Côte d'Ivoire, cocoa farmers generally receive a stable farmgate price throughout the season. The Conseil du Café-Cacao (CCC) in Côte d'Ivoire and the Ghana Cocoa Board (COCOBOD) regulate their domestic market system with a self-financing price stabilization policy to protect farmers from intra-season price volatility (for a concise review, see ICCO, 2024).

Forward selling and farmgate price fixing

This price stabilization policy involves selling forward cocoa contracts (Ghana) and export licences (Côte d'Ivoire) at the previous season's international benchmark prices. The farmgate price is then locked-in based on the average price received in these forward transactions, plus a guaranteed living income premium (the LID, discussed in the following section).

Beginning a year in advance, the CCC and COCOBOD sell export licences and forward contracts for the upcoming season. At the opening of the new season, they announce the fixed farmgate price based on the following criteria: at least 60% of the average price paid for export licences and forward contracts for the upcoming season; plus the LID of USD 400 per tonne as established by the Côte d'Ivoire and Ghana Cocoa Initiative (ICCO, 2024). In Ghana, the marketing scheme is currently undergoing adjustments. The following narrative highlights the key features of the scheme as implemented until recently. Both schemes set margins for each participant in the supply chain, including cooperatives, transporters, local buying companies (LBC), and exporters. Though the farmgate price is fixed in both countries, buyers can offer an additional premium as part of their sustainability programmes or under third-party certification schemes.

This forward sale strategy ties farmgate prices to the previous season's international benchmark prices. In Ghana, for example, most contracts for the 2024/25 harvest were entered based on 2023/24 market prices (Box 5). This marketing strategy helps maintain stable prices; however, it may result in lost sales revenue when future price spikes raise the value of contracts negotiated in advance, with the benefits of rising prices flowing to buyers and resellers instead of producers. Additionally, while this price stabilization policy addresses price volatility for producers within a season (intra-seasonal producer price volatility), it does not shield export and producer prices from variations that occur between seasons (inter-seasonal price fluctuations).

Box 5: Forward selling and farmgate price fixing by CCC and COCOBOD

CCC and COCOBOD sold export licenses and forward contracts for the upcoming 2024/25 season during the 2023/24 season. The prices for these export licenses and forward contracts were negotiated based on cocoa futures contracts that would mature in the 2024/25 main season (specifically DEC-24, MAR-25, and MAY-25), but were sold during the 2023/24 season

The farmgate price was set at about 60% of the revenue of the forward sales plus the LID. The remaining balance, after allocation to the farmers, would cover expenditures related to the development of the cocoa sector (so-called industry costs, see section 4.2.2), the margins of licensed buying companies (LBCs), as well as COCOBOD operations. The buyer's margin was fixed at a minimum of 9% and a maximum of 11% of the determined producer price (Ghana COCOBOD, 2023).

It can be verified that farmers received farmgate prices at the previous season's international benchmark prices plus the LID. ICCO has calculated farmgate prices for the 2024/25 season using a formula that outlines the procedure mentioned above:

 $FarmGatePrice_{2024/25\,season} = 60\% \times AveragePrice_{2023/24\,main\,crop}^{DEC24,MAR25,MAY25} + LID$

The calculated prices align closely with the official farmgate prices announced by Ghana and Côte d'Ivoire at the start of the 2024/25 season (ICCO, 2024).

Source: ICCO, 2024; Ghana COCOBOD, 2023.

In Ghana, COCOBOD could lock in prices because its subsidiary, the Ghana Cocoa Marketing Company Limited (CMC), still had a quasi-monopoly on the country's cocoa export sales² and sold forward or hedged approximately 70% of the expected harvest. CMC used forward sales contracts as collateral to secure syndicated loans from international banks for financing the purchase of cocoa beans from farmers at fixed prices. The syndicated loan for cocoa was discontinued in 2025, raising the need for new funding strategies.³

In Côte d'Ivoire, the CCC manages an export auction system. Private exporters are required to participate in this system. Approximately 70–80% of the next season's crop is sold in advance through this system. Under this model, exporters compete for permits to export specific volumes at agreed prices. According to Ivorian regulation, exporters must provide CCC with a counterparty contract that locks in prices. The CCC then uses the average auction price to establish a guaranteed price for farmers (Aidenvironment and Sustainable Food Lab, 2018, pp. 8 and 11).

The Living Income Differential (LID) scheme

In 2019, Côte d'Ivoire and Ghana announced the Living Income Differential (LID) policy. This was a joint effort aimed at leveraging their combined market power to increase the farmgate price and farmers' share in the value chain (Boysen et al., 2021). The LID scheme moves a step further beyond forward sales and the auction of export licenses, aiming to stabilize and support farmgate prices, even if it still keeps farmgate prices tied to the previous season's international benchmark prices.

² Since 2000/01, licensed buying companies are allowed to export up to 30% of their cocoa purchases.

³ Until the 2023/24 cocoa season, COCOBOD received an annual syndicated loan that was collateralized with forward sales and provided working capital to local traders. This syndicated loan scheme was discontinued in August 2024. The implications of this funding change are still being fully assessed.

Box 6: The Living Income Differential (LID)

In Côte d'Ivoire and Ghana, the scheme institutes a fixed LID (a premium) of USD 400 per tonne for every cocoa contract sold by either country starting from the 2020/21 season. The LID is applied to all categories of cocoa bean contracts from CCC and COCOBOD's CMC (Cocoa Marketing Company). It is designed to be paid on top of the generic premium (country differential) of the two countries. The LID does not appear to be subject to any tax or deductions and is ostensibly paid in full to farmers (ICCO, 2024).

In some detail, the contract price for the sale of cocoa beans from CCC and COCOBOD is determined using the following formula: the price of London Cocoa futures (ICE EU [Terminal] in GPB per tonne) set to mature at the expected delivery date in the upcoming season, plus the country differential premium (CountryDiff in GBP), both converted to USD, and the LID.

$$Contract\ price = \left\{ [ICE\ EU(Terminal)\pounds + Country\ DIFF\ \pounds]X\frac{GBP}{USD} \right\} + LID$$

Côte d'Ivoire and Ghana initially announced that the LID scheme would establish a floor price for cocoa farmers and create a stabilization fund. Under this scheme, farmers were guaranteed to receive at least 70% of a floor export price of USD 2,600 per tonne, including the LID. If the average gross Free on Board (FoB) price at the end of the cocoa season fell between the USD 2,600 floor and USD 2,900, farmers would be eligible for bonus payments. If the export price exceeded USD 2,900, any excess amount would be reserved and deposited into stabilization funds under the Ghana-Côte d'Ivoire Cocoa Initiative secretariat. This stabilization fund was intended to cover any shortfalls when the export price, including the LID, fell below a certain threshold. However, the minimum price was later removed from the policy and has not been reinstated (as of the time of writing). It remains unclear what has happened to the stabilization fund since then.

Source: Côte d'Ivoire CCC (Conseil du Cafö et Cacao) and Ghana COCOBOD, 2019.

The LID experienced a rough start with the breakout of the COVID-19 pandemic and the subsequent drop in cocoa prices. During the 2021/22 and 2022/23 seasons, the LID scheme was undermined by persistently low cocoa prices on the international market and the adoption of various circumvention mechanisms by international buyers ("Cacao," 2021; Ghana COCOBOD, 2022a, 2022b; Kliemann, 2022). These strategies included shifts in sourcing practices and the erosion of country differentials for LID countries (for an overview, Kliemann, 2022). International buyers were accused of sourcing vast quantities of cocoa from non-LID countries or through futures markets to avoid paying the LID (Kliemann, 2022). Additionally, traders/grinders often chose to use their existing stockpiles rather than sourcing new beans from Côte d'Ivoire and Ghana (Aboa, 2020; Aboa and Angel, 2019). When buyers did pay the LID, they leveraged their negotiating power to reduce the country-origin differential premium typically paid for beans from Côte d'Ivoire and Ghana, which weakened the overall price (Ghana COCOBOD, 2022a; Hütz-Adams and Oxfam, 2024). In Ghana, for example, buyers were discounting the country origin differential by as much as USD 270-300 per tonne of cocoa, significantly offsetting the LID premium (Ghana COCOBOD, 2022a). As pointed out in section 4.3.1, these purchasing practices may eventually come under scrutiny within the framework of new supply chain due diligence laws.

Since the 2023/24 season, harvest deficits in West Africa have restored country differential premiums at a higher level than the LID itself (Swiss Platform for Sustainable Cocoa, 2024). Overall, supply tightness has made buyers more willing to accept LID terms. This tight situation has also led to renewed structured discussions between regulators in producing countries and senior executives of multinational cocoa-buying companies, which could lead to more productive cooperation as regards the LID scheme (Ghana COCOBOD, 2022b).

4.2.2 Discounted farmgate prices?

Forward selling and price fixing in Ghana and Côte d'Ivoire have both strengths and drawbacks.

The strengths of the system include more stable prices and relatively effective quality management systems, both of which are important for ensuring a living income for cocoa farmers. At the start of the harvest season, farmers are guaranteed a stable price for the entire crop year. This front-loaded cash flow and price stability are crucial factors contributing to improved livelihoods. Unlike private sector schemes, which are selective, the Ghanaian/Ivorian system is sector-wide, offering price stability within the season to millions of farmers. In addition, the public pricing systems in Ghana and Côte d'Ivoire fund quite effective quality management systems. This is reflected in the premium price for cocoa from these two regulated markets, traditionally 10% higher than the average world market price.

The drawbacks are heavily discounted farmgate prices, potential inefficiencies, and related transparency and accountability challenges. In this context, two important questions arise. The first economic question is **how much farmers are willing to forgo to receive a fixed price through the season**. The stabilization policy implemented in Ghana and Côte d'Ivoire serves as an insurance against price drops, but it also incurs losses if there are unexpected price spikes. In the 2023/24 harvest, farmers in Ghana and Côte d'Ivoire received about half of the price received by cocoa farmers in Peru and Ecuador (Swiss Platform for Sustainable Cocoa, 2024, p. 5). For the 2023/24 harvest, this difference is largely due to Ghana and Côte d'Ivoire locking in the farmgate price at a lower level at the beginning of the harvest, while subsequent market prices were higher throughout the year (Figure 2).

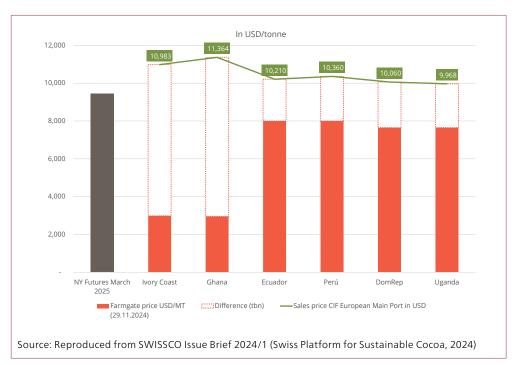


Figure 2: Farmgate price and sales price (Nov. 2024)

To address this problem, a pricing adjustment mechanism could be included in forward contracts and export licenses to ensure that prices are reviewed in case of price spikes. An open question is whether it would not be equally important to establish mechanisms for price adjustments in the event of price drops.

A second question regards the cost–benefit balance of the policy for farmers. Farmers in Ghana and Côte d'Ivoire have been receiving significantly lower farmgate prices, a trend that has persisted over the long-term (Bymolt et al., 2018, p. 212; Swiss Platform for Sustainable Cocoa, 2024, p. 6). Importers are paying higher prices for cocoa from Ghana and Côte d'Ivoire compared to other countries, which

suggests that the lower farmgate prices result from high taxes and other deductions. This raises questions about the opportunity costs associated with these discounted prices, specifically whether the services provided truly meet the farmers' needs and whether some of these services could be supplied more competitively by private operators.

In Ghana, until recently, certain amounts were deducted from the gross FoB price to cover "industry costs". These costs refer to expenditures related to the development and functioning of the cocoa industry. They cover pest and disease controls and various social schemes for farmers, but also, for example, debt servicing by COCOBOD, cocoa road construction, and the high cost of subsidized inputs (fertilizers and agrochemicals). In some years, the industry cost component accounted for as much as 56% of the gross FoB price. The remaining FoB value (Net FoB in GHC) was not allocated solely to farmers, but shared among the stakeholders – farmers, licensed buyers, haulers, and COCOBOD – through a negotiation process (Figure 3). This top-down determination results in heavily discounted farmer prices.

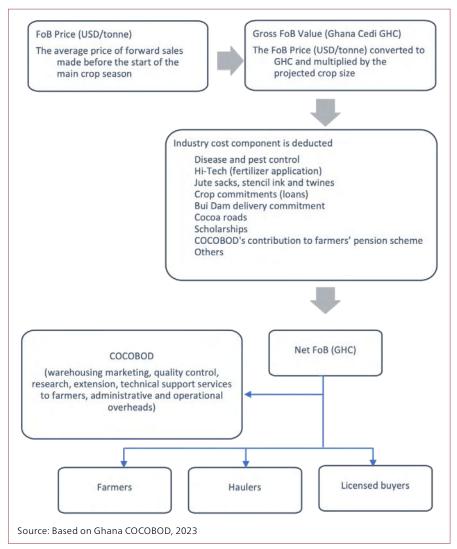


Figure 3: Top-down farmgate price determination in Ghana until 2024/25

A way to redress the situation is to straightforwardly cut-off the farmer price as a percentage of the gross FoB value before any deductions are made. Ghana is moving in this direction to preserve the farmers' share of the revenues, moving away from a model that had been in place for over three decades. At least 60% and at most 70% of the gross FoB price is now set as the producer price, to be reviewed annually. The remaining balance will cover industry costs, the margins of licensed buying companies (LBCs), haulers, and other COCOBOD operations (Ghana COCOBOD, 2023).

4.2.3 Addressing transparency and accountability challenges

Discounted farmgate prices raise questions about the cost-effectiveness of the system (Aidenvironment and Sustainable Food Lab, 2018; Bymolt et al., 2018; Oomes et al., 2016), which invites consideration of related transparency and accountability challenges. This involves two main issues: the transparency of the farmgate price determination, and the transparency and efficiency of cocoa tax revenue spending (Aidenvironment and Sustainable Food Lab, 2018; Oomes et al., 2016, pp. 86–87). In these two areas of concern, transparency and accountability are intricately intertwined. Moving from the transparency and accountability gaps identified in the literature, Table 3 lists potential options to address these deficiencies, also drawing insights from administrative pricing schemes in the extractive sectors. Current reforms in cocoa-producing countries are moving in the direction of addressing these gaps (Ghana COCOBOD, 2023).

 Table 3: Transparency and accountability gaps in regulated cocoa markets and options to address them

Issues	Challenges	Options
1. Political interference in the price-setting process	It has been observed, for example, that political pressures to raise farmgate prices is strong in election years, with the government transferring parts of the public budget to the cocoa sector (Aidenvironment and Sustainable Food Lab, 2018, p. 10).	An option is to place the price-setting bodies "at arm's length of the government", for example, through a multi-stakeholder governing board (Aidenvironment and Sustainable Food Lab, 2018, p. 11). This is formally the case in Ghana, where farmgate prices are determined by the Producer Price Review Committee (PPRC), a body including representatives from COCOBOD, Farmers, Bank of Ghana (BOG), Licensed Cocoa Buyers' Association of Ghana (LICOBAG), Haulers, and a representative from the Institute of Statistical, and Social and Economic Research (ISSER) of the University of Ghana. However, the committee is co-chaired by the Ministry of Finance and Economic Planning, and the different participants hold varying levels of power.
2. Administrative discretion	In the past, there has been significant room for administrative discretion in computing deductions and assessing margins (see, e.g. lump sum allocations to expenditure items under the industry category component in Ghana). The price-setting committees are not always guided by a standard operating procedure or guidelines approved by stakeholders and documented in law. As acknowledged by COCOBOD, this situation has given rise to perceptions of opaqueness in the price determination process (Ghana COCOBOD, 2023).	The regulator can institute a legally binding framework for the price-setting mechanism. The framework can document all the processes (operating procedures and guidelines) and policies (for benchmarking producer prices and industry costs) that the price-setting committee must adhere to. COCOBOD is moving in this direction. It is also important to allow for feedback loops and checks and balances: This could be achieved by promoting participatory monitoring and independent oversight mechanisms separate from government regulatory authorities. Possible venues include involving civil society and parliamentary committees, as well as external audit procedures. In particular, the methodologies used to calculate deductions and assess margins could be made publicly available and subject to expert review/audit. Regulated pricing schemes can be very transparently administered, as some administrative pricing regimes for oil show. In Norway, the Petroleum Price Board (PPB) sets tax reference prices, also known as norm prices, to calculate the taxable income for oil companies. The PPB meets every quarter to set the daily norm price for each oil producing field for the previous quarter. The PPB sets prices based on benchmark market prices (Brent indicators), also considering the data and views presented by the companies. Companies may appeal the final norm price within 30 days of its publication.

	3. Transparency gaps in the contract/auction system	In Ghana, the details of private contracts, including the number of contracts sold, the recipients, and the existence of price renegotiation/adjustment clauses, are not publicly disclosed due to confidentiality provisions. For example, it is unknown if forward sales contracts sold by the COCOBOD include price renegotiation clauses in the event of price spikes. In Côte d'Ivoire, stakeholders are concerned about the lack of transparency in the auction system, particularly the determination of prices and volume awards.	While confidentiality rules prevent disclosure of many contract and auction details, standardized models or guidelines (e.g. contract terms) can be developed and published without infringing on any confidentiality procedure. Standardized model sale agreements can include a pricing adjustment mechanism to ensure that prices are reviewed in case of price spikes. Further, the commodity sales contract or its key terms can be disclosed without disclosing the buyer's identity.
	4. Rent-seeking opportunities/ political capture/inefficiencies in the public provision of services and in the licensing system	It has been observed that some services, such as input distribution, could be more efficiently supplied by the private sector. There are allegations of political interference in Ghana's mass spraying programme due to the involvement of political district heads (Oomes et al., 2016, p. 87). In Côte d'Ivoire, the licensing system offers opportunities for rent-seeking and corruption.	Consider phasing out subsidized services and inputs that can be replaced by improved cultural practices on cocoa farms or that can be delivered more costeffectively without the regulator's involvement. It is important to assess the implications for farmers after the withdrawal of these subsidies. Key factors to evaluate include the cost and availability of inputs in both local and international markets, exchange rate volatility, and whether centralized procurement of inputs can lead to cost savings.
_	. Accountability of public expenditures	Both countries lack transparency and accountability frameworks to monitor reinvested cocoa tax revenues and the costeffectiveness of these investments.	Marketing boards may consider clarifying and making publicly available information about the export tax component and the use of the cocoa tax revenue, drawing insights from the Extractive Industries Transparency Initiative (EITI) framework (see below).

More far-reaching transparency requirements in regulated cocoa markets, such as full disclosure of forward arrangements, may build on institutional arrangements and disclosure templates that have been developed in the context of the Extractive Industry Transparency Initiative (EITI) (Box 7). However, applying EITI-type contract disclosure to soft commodities like cocoa is not straightforward. This is due to significant differences in resource ownership and materiality thresholds between hard and soft commodities. Oil, gas, and mineral resources are typically owned by the public sector, whereas soft commodities are generally privately owned – even when the public sector maintains an export monopoly. Further, transactions involving the sale of oil, gas, and minerals by state-owned enterprises are usually large-scale, while forward sales contracts and export licenses in cocoa tend to involve much lower-value transactions. As a result, considerations of proportionality regarding public disclosure and confidentiality are more complex for soft commodities compared to hard commodities.

Box 7: EITI and commodity trading: Insights for the cocoa sector

In 2003, a diverse coalition of countries, companies, and civil society organizations established the Extractive Industry Transparency Initiative (EITI). This multi-stakeholder forum aims to ensure that revenue from oil, gas, and mining activities benefits the people in the countries where these natural resources are found. Currently, nearly 60 countries are implementing the EITI standard.

At its core, the EITI standard requires participating governments and companies to disclose revenue received and payments made in relation to oil, gas, and mineral exploration and production. Specifically, Requirement 2.4 of the EITI Standard mandates that countries fully disclose any extractive contracts and licenses that have been granted or amended since January 2021. The EITI standard requires the full text of all contracts and licenses to be disclosed without exceptions, given the overriding public interests involved.

Since 2013, EITI has expanded its focus to include commodity trading to some extent, moving beyond its original emphasis on upstream activities. EITI's Requirement 4.2 addresses "first trades" in commodities, which refer to sales made by governments or state-owned enterprises (SOEs) to unrelated or related parties. It requires governments, SOEs, or third parties appointed by the state to disclose the revenues collected from the sale of oil, gas, and minerals, as well as the volumes sold, broken down by buying company. To promote greater voluntary disclosure beyond the minimum requirements set, a reporting template has been developed for SOEs regarding their "first sales". This template can also be applied to traders on the purchasing side. Under this template, the parties disclose specific details about what they buy, from whom, and at what price. This granular disclosure is intended to reduce corruption risks related to buyer selection, contract negotiations, and the transfer of revenues to the treasury. This is particularly crucial in scenarios involving "in-kind payments" and unconventional sales, such as commodity-backed loans.

Key findings from an independent evaluation of EITI (Voconiq and Square Circle, 2023) highlight its significant value in promoting dialogue, processes, and data that support transparency and accountability. However, the assessment is less conclusive regarding the initiative's socio-economic impacts, largely due to the difficulties in empirically establishing a causal link between transparency interventions and improvements in governance.

The transparency measures discussed so far could be part of a wider transparency agenda that gives equal importance to other critical transparency issues concerning cocoa pricing. As stressed by cocoa regulators in producing countries, this could include more transparency about:

- Stocks and stocking arrangements by major cocoa companies;
- The governance structures of the Intercontinental Exchange, Inc. (NYSE: ICE), where the benchmark prices for these commodities are established daily.

4.2.4. Revisiting supply-side management

In the absence of supply management measures based on sustainability criteria, price incentives and LID-type schemes could stimulate increased production, leading to potential issues such as child labour, deforestation, and downward pressure on prices (Boysen et al., 2023, 2021). A key question is then how to address incentives to expand production and its unintended consequences. We consider options that nest supply management objectives in land, agricultural, and social policies, and connect them with financial incentives.

Traditional means to manage supplies include output restrictions – such as production, marketing, or export quotas – as well as storage-based interventions/stock management. They have proved extremely costly and difficult to enforce. The call is for more innovative forms of supply management that capitalize on market dynamics and incorporate ongoing regulatory developments. The following pathways are worth considering:

Link with land and conservation policies, leveraging climate finance and the EUDR. The idea is to strategically link cocoa supply management with conservation and land management policies at national, subnational, and local levels. This involves instruments such as zoning, which governs land uses in some geographic areas, as well as user rights within landscape approaches. The socioeconomic viability of this option depends on the financial incentives provided to cocoa farmers to set aside or leave idle part of the land devoted to cocoa. One way is to tap into the public and private climate finance that is being mobilized for developing countries, estimated at USD 21.9 billion in 2022 (OECD, 2024). Local governments could consider climate funding schemes (e.g. REDD+ programme) and conservation-related funding (Kunming-Montreal Global Biodiversity Framework) when carrying out zoning classification. As regards enforcement, it is strategic to capitalize on the monitoring mechanisms being established in cocoa-producing countries to ensure compliance with the EUDR. This includes geolocation services and remote sensing systems capable of detecting deforestation and forest degradation. At the micro level, one enforcement option is to build on community forest management and trust-based conformity assessment procedures set up in the context of sustainable landscape certification approaches.

Link with agricultural policies. A related approach involves integrating supply management objectives into agricultural diversification policies. This can be achieved by encouraging cocoa agroforestry instead of monocropping systems or supporting cocoa producers in transitioning to other crops at the end of the cycle. This aligns with policies aimed at diversifying local agriculture by promoting crops other than cocoa. The objective is to improve the resilience of rural households and the local economy through diversification (Swiss Platform for Sustainable Cocoa, 2024, p. 9).

Link with social policies, e.g. pension schemes. Ghana's cocoa regulator, Cocobod, has earmarked 1% of cocoa sold by cocoa farmers as counterpart funding for the country's Cocoa Farmers Pension Scheme. In addition to providing a steady income for farmers upon retirement, pension schemes can also be structured to incentivize early retirement as a way to manage excess supplies. However, questions may arise as to whether this is still relevant in a market where there is a supply deficit, and where the concern is how to motivate young generations to remain in farming.

Link with mechanisms at the enterprise and supply chain level. Issues of overproduction can be partly tackled through long-term arrangements that foster direct trade relations. These relations may facilitate coordinated planning, including as regards expected volumes.

All these pathways integrate supply management interventions into comprehensive policy frameworks supported by strong political will and connected to financial incentives. They require close collaboration between the line ministry/cocoa sectoral authority and other ministries/departments, particularly those responsible for land planning and forests.

4.2.5. Exploring alternative pricing mechanisms

Under the pricing mechanisms discussed so far (forward sales and LID), farmgate prices remain linked to international benchmark prices determined on derivatives markets (Staritz et al., 2023). An alternative option is to reverse the price formation process towards a cost-plus model, as under the Fairtrade Minimum Price. Here prices are fixed based on costs of production, including a reasonable margin for producers. This involves legal levers to scale up private sector experiments to delink farmgate prices from international benchmark prices and reverse the price construction process towards a cost-plus model.

A relevant development in this respect are the EGalim laws in France, which were intended to reverse the price formation process in French agri-food chains (Delpech, 2021; *EGalim 1*, 2018; *EGalim 2*, 2021; Ministère de l'Agriculture et de la Souveraineté alimentaire, n.d.). They point to major design and enforcement challenges in legally enforcing cost-plus approaches, but also offer practical insights into achievable results, such as gathering and sharing market information.

Box 8: The EGalim laws

The EGalim laws⁴ devise and pilot legal innovations in contract and commercial law to address structural power imbalances in food and agricultural chains. The aim of the EGalim laws is to oblige the first buyer of agricultural products to consider the farmer's cost of production, and to require the next links in the chain (manufacturers and distributors) not to negotiate the value of the agricultural raw material in the price of the product, right up to the retail price. The price paid to the farmer must therefore cover the "cost price" (prix de revient), which corresponds to the cost of production (variables and fixed costs, amortization, and the remuneration of productive factors – land, capital and the farmer's work) minus subsidies and co-products.

Upstream (farmers and their first buyers), the EGalim laws require that farmers propose prices based on production costs and that inter-branch organizations develop benchmarks for production costs and market indicators. In some detail, inter-branch/industry organizations (*interprofessions*) are mandated to develop and disseminate cost and market indicators as part of their industry plans (*plans de filière*). The Observatoire de la Formation des Prix et des Marges (Observatory of Price Formation and Margins) supervises and disseminates these benchmarks. Contracts between farmers and buyers (that must be written and multi-year) are proposed by farmers and must be linked to the production cost indicators drawn up by the inter-branch organizations and/or the technical institutes. They can either establish a fixed price with an automatic price revision clause based on production cost indicators or specify a formula that includes at least one production cost indicator for determining the price. The automatic price review clause must be based on a formula agreed upon by both parties, which considers indicators related to production costs in agriculture.

The EGalim laws implementation highlights the difficulties of establishing relevant production cost indicators and benchmarks. It has been observed that the cost of production is closely tied to expense management, which depends on a farmer's technical performance and debt management (Kirsch, 2024). This can vary significantly depending on the farmer's career stage, especially during the initial phases compared to when they operate at full capacity. Further, a farmer's income will depend not only on the cost of production, but also on the farmer productivity and the added-value of the farmer's products (ibid). The price of products therefore explains only part of the difference in income between farms of the same type.

However, the EGalim experiment also offers useful perspectives on how to engage a diverse group of key market participants in cooperative behaviour, with guidance and oversight from the sectoral authority. Three aspects of the EGalim framework may be of interest to sectoral regulators and competition authorities in cocoa-producing countries and to multi-stakeholder platforms on cocoa.

First, regulators in developing countries can look to the EGalim framework for guidance on how to establish a legal basis for gathering and sharing benchmark data on agricultural production and marketing costs, prices at various stages of the chain, and differentials based on product quality, origin, and traceability. This may imply amendments to existing contract, commercial, and competition law frameworks.

Second, the EGalim laws provide practical guidance on the types of cost and market indicators that can be collected, as well as the methodologies for doing so. They also offer workable examples for establishing central repositories for prices and margins, along with insights into data management and dissemination plans.

Third, cocoa-producing countries may consider the EGalim laws' mechanisms and requirements that led inter-branch/industry organizations to develop and publish benchmark indicators as part of their

⁴ The EGalim laws were enacted in 2018, 2021 and 2023 (EGalim 1 (Loi n° 2018-938 du 30 oct. 2018, JO 1er nov.), EGalim 2 (Loi n° 2021-1357, 18 oct. 2021, JO 19 oct.), and EGalim 3 (Loi n° 2023-221 du 30 mars 2023 tendant à renforcer l'équilibre ans les relations commerciales entre fournisseurs et distributeurs, JO, 31 mars 2023, texte n°1).

industry plans. The challenge is to integrate such regulatory disclosure into a wider supply chain collaborative effort based on principles of knowledge sharing and cooperation. This invites us to consider more flexible, imaginative, and innovative forms of regulation that actively engage governments, businesses, and research institutions.

4.3. Reform options: Cocoa importing countries

Focusing solely on producing countries is not enough. The challenges faced by the LID scheme illustrate that price-related schemes in producing countries are likely to fail unless they are supported by industry players downstream, such as traders, processors, manufacturers, and retailers in major consuming countries. In the bulk market segment, business dynamics drive these companies' purchasing divisions to buy cocoa at the lowest price possible, entrenching unsustainable purchasing practices. Regulatory intervention may be necessary downstream to proactively realign business incentives towards more sustainable sourcing practices.

This section briefly considers public policy options available to consuming countries. We examine changes in framework rules that could help to address unfair pricing patterns, creating opportunities for the upscaling of niche innovations. This involves examining transformative legal reforms being implemented or considered in the EU context in key "regime" areas: corporate due diligence laws, unfair trading practice rules, mandatory contract mechanisms, and competition rules on horizontal agreements. The focus is on regulatory reforms that directly impact pricing mechanisms (levers) as well as those that create necessary conditions for coordinated purchasing practices aimed at fostering living income (enablers). The following sections consider the potential relevance of these ongoing reforms to purchasing practices and pricing mechanisms in the cocoa sector.

4.3.1 A human rights due diligence approach to living income

There is a growing dynamic for due diligence laws in consuming countries as a means to establish sustainable value chains that provide farmers with living incomes (Brack, 2020, pp. 39–45). Major cocoa processors, chocolate manufacturers, and branders have expressed their support for mandatory EU-wide due diligence legislation that will also contribute to achieving a living income for cocoa farmers. Barry Callebaut, Ferrero, Mars Wrigley, Mondelēz, Nestlé, and Unilever have issued joint statements with advocacy groups such as the VOICE Network, Fairtrade, and Rainforest Alliance to promote this cause (Barry Callebaut AG et al., 2019; Fairtrade International et al., 2021).

From a public international law perspective, due diligence obligations in respect of prices are rooted in human rights law. The due diligence obligation to promote living incomes is linked to "the right to an adequate standard of living" (i.e. living income) and "the right to just and favourable remuneration" (living wage) enshrined in core human rights instruments. Under this framework, moving towards living income prices/wages should be part of companies' business responsibility to respect fundamental human rights.

Yet, due diligence is a duty to act with utmost care, not a guarantee of results. Further, realizing living income is subject to the principle of progressive realization, similar to other socio-economic rights (Brack, 2020, p. 43). Along these lines, the industry's commitment is to employ due diligence regulations to address living income concerns progressively and to the extent possible. Their commitment does not go as far as to explicitly include a due diligence obligation to pay living income reference prices or otherwise determined minimum prices.

⁵ Pursuant to Article 25(1) of the UN Declaration on Human Rights (UDHR), "everyone has the right to a standard of living adequate for the health and well-being of himself and his family". Under Article 11 of the International Covenant on Economic, Social and Cultural Rights (ICESCR), everyone has the right to "an adequate standard of living for himself and his family". The right to an adequate standard of living is included in several other human rights treaties, including the Convention on the Rights of the Child (CRC, Article 27), the Convention on the Elimination of All Forms of Discrimination against Women (CEDAW, Article 14), and the Convention on the Rights of Persons with Disabilities (CRPD, Article 28). The right to just and favourable remuneration is enshrined in Art. 23 of the UDHR and Art. 7 of the ICESCR, among other instruments.

Can due diligence obligations concerning prices be strengthened to include result-based obligations, going beyond traditional due diligence approaches? A human rights due diligence approach to living income can be interpreted expansively to include a company's duty to exercise due diligence to ensure fair/living income prices are paid throughout its supply chain. However, this approach raises significant practical implementation challenges and raises questions of commercial viability. An alternative approach, more aligned with minimum due diligence requirements, would be to compel companies to refrain from hindering living income policies in producing countries. The two approaches are briefly discussed below.

A due diligence obligation to pay fair/living income reference prices?

Let us first consider a due diligence obligation to ensure that fair/living income prices are paid through the supply chain. Besides concerns about the overall economic impact of price incentives (Chapter 2), there are some operational challenges that need to be addressed. Legal design and implementation challenges arise regarding (i) price parameters, (ii) companies and supply chain relationships covered, and (iii) remedial action in case of unfair pricing. The following table summarizes some practical issues that would need to be addressed, and the legal constructs that could be used for this purpose.

Table 4: Due diligence obligation to ensure that fair/living income prices are paid through the supply chain: Practical and legal challenges

(i) Price parameters

To be legally actionable in meaningful terms, due diligence obligations about more remunerative prices would need to be anchored in concrete price and premium approaches. One option is to fall back on the major existing third-party certification schemes, such as Fairtrade, Rainforest Alliance, UTZ, etc. Certifications issued by recognized private fairtrade schemes would serve as evidence of fulfilling fair price obligations. Another approach is to use living income benchmarks and reference values. The Living Income Community of Practice is developing tools and resources for calculating the actual or existing incomes of smallholders, as well as living income benchmarks and reference values. The way forward requires pooling and aligning resources around this effort through enhanced "(m)ulti-stakeholder collaboration and coordination on policy design, and cross-sector data sharing attempts" (Waarts and Kiewisch, 2021, p. 52). Questions remain about the commercial viability of bringing such pricing models to a scale where they become minimum requirements (quality premiums would need to be added on top).

(ii) Companies covered

There are questions of scope: which companies and supply relationships should be affected? One approach is to make all companies importing, processing, and selling cocoa and cocoa products in the jurisdiction subject to due diligence. Downstream actors, such as cocoa processors and branders, are entitled to refer to their suppliers' due diligence statements, but they would remain responsible for quality assurance. Alternative approaches would be targeted and risk-based, focusing on materiality thresholds and critical nodes such as importers.

(iii) Supply relationships covered

Under meaningful due diligence regimes, companies have a responsibility to exercise due diligence throughout their supply chain, as outlined in the original version of the CSDDD. This begs the question of what steps international cocoa buyers can realistically take to ensure that the living income price/premium they pay in export markets is passed on to farmers in producing countries (farmgate price). The situation becomes particularly complex when international buyers procure cocoa beans from unrelated exporters or through a chain of independent local traders and brokers. In such cases, buyers must have a reliable method for ensuring that their supply chains provide living income and fair prices (Brack, 2020, p. 44). There are two related options available.

First, some kind of traceability system would likely be necessary for the implementation of a due diligence regulation (Brack, 2020, p. 44). Operators' due diligence systems must include documentation (passed through the supply chain) that credibly attests to sustainable purchasing practices. In practice, this falls back on third-party (Fairtrade) certification, absent regulated price mechanisms in producing countries. It implies identity-preserved and segregated cocoa supply chains (possibly linking with the EUDR).

A second option would involve some form of "contractual assurance" that cascades through the supply chain, as under the CSDDD (Art. 7.2(b) and 7.4) and the Dutch Child Labour Due Diligence Act. In practice, companies not carrying out due diligence themselves would be required to obtain contractual assurance from their suppliers that they have conducted due diligence (Brack, 2020, p. 45). However, to avoid due diligence becoming a mere formality of including standard clauses in contracts, such contractual assurances must be accompanied by appropriate measures to verify compliance. For the purposes of verifying compliance, companies would likely fall back on industry initiatives or independent third-party verification.

(iv) Penalties/remediation mechanisms

What requirements for compensation and remediation would apply when companies fail to ensure that their supply chains pay living income/fair prices? In Ghana and Côte d'Ivoire combined, up to two million small-holder farmers produce cocoa (Waarts and Kiewisch, 2021, p. 8). Their income is far below recent living income benchmarks. In this situation, should farmers or their organizations be entitled to bring complaints to the attention of companies in Europe and seek to have them addressed through non-judicial and judicial, state or company-based mechanisms? In addition to concerns about commercial and economic feasibility, this issue raises questions of legal standing, collective redress, and agency.⁶ In the end, claiming compensation in such cases would hardly be practical, unless living income prices/differentials are officially established in producing countries.

A due diligence obligation not to frustrate living income initiatives?

As discussed above, directly including living income/fair prices as part of a company's due diligence obligations can be a complex process with many practical challenges to overcome. Still, human rights due diligence could play an important role in scenarios where producing countries set living income prices/premium schemes. For example, the governments of Ghana and Côte d'Ivoire require buyers to pay an established LID – an additional USD 400 per ton of cocoa on top of the export price, starting from the 2020/21 season (see section 4.2). This initiative aims to guarantee a fixed, higher minimum price to farmers. Under a due diligence framework, companies should act with due diligence to avoid infringing upon the right to a decent standard of living, as embedded in such initiatives. This includes not attempting to circumvent the scheme or divert sourcing to non-LID countries.

The underlying theory of change is as follows:

- IF producing countries enact living income initiatives, and
- IF the initiatives are implemented in good faith and are relatively effective in improving the livelihood of vulnerable stakeholders sustainably (i.e. without promoting oversupply or unsustainable practices such as land conversion, the use of cheap or unpaid labour, and gender discrimination)
- THEN companies should act with due diligence to avoid frustrating the scheme; this includes not circumventing it or diverting procurement to obtain cocoa from non-LID countries
- BECAUSE corporate responsibility to respect human rights means acting with due diligence to avoid infringing on the right to a decent standard of living, as embedded in living income initiatives

Turning back to our LID case, this begs a central question: Is the LID initiative being implemented in good faith and is it increasing the livelihood of poor farmers sustainably? If the answer is "Yes", then certain behaviour of major international buyers – such as eroding the country differential and diverting their sourcing to non-LID countries – would amount to a violation of their due diligence obligation to "respect" human rights. This would trigger access to remedies for aggrieved parties under human rights law and due diligence frameworks.

4.3.2 The inclusion of price terms in unfair trading practices (UTP) laws

When power is distributed unevenly in supply chains, the party enjoying a position of superior bargaining power may use this advantage to impose unfair conditions on other market participants (Fair Trade Advocacy Office, 2019, p. 24). The impact of buyer power on the structure of supply chains has been well documented in Europe, particularly in the grocery retail sector (Autorità Garante della Concorrenza e del Mercato, 2013; Autorité de la concurrence, 2015; Bundeskartellamt, 2014; Fair Trade Advocacy Office, 2019, p. 24; UK Competition Commission, 2008). Eleven million farms deal with a diminishing number of increasingly powerful processors, distributors, and retailers (European

⁶ They include the availability of collective complaint procedures, procedural rights to file complaints "on behalf of", and guaranteed access to information and legal aid relevant to pursue effective remedy.

Commission, 2019). Retailers and brand manufacturers capture most of the value from the trade of goods, and they often impose on their suppliers terms and conditions that result in cost-cutting and the externalization of social and environmental costs and responsibilities (Fair Trade Advocacy Office et al., 2022, p. 46).

This phenomenon is also observed across the border in global agricultural and food supply chains. For example, there is evidence that leading grocery retailers in the UK have passed on to Kenyan producers the cost of compliance with their private standards on food safety and traceability – prompting a shift in production from smallholders to large farms, often owned by the exporters (Asfaw et al., 2010). In the context of the EUDR, there are concerns that small-scale farmers will disproportionally bear the compliance costs linked to geolocation and traceability if these costs are passed on along the value chain to farmers. Additionally, they may face abusive terms when it comes to collecting, managing, and submitting the required geo-location data for trades compliant with the EUDR.

Broader concerns arise in respect of purchasing alliances by distributors in the food retail sector, commonly referred to as International Buying Groups (IBGs; Autorité de la concurrence, 2018, 2020). To offer the lowest prices to consumers in Europe, IBGs exert downward price pressures on multinational brands and manufacturers – such as Nestlé and Unilever – with cascading effects throughout their supply chains, ultimately reaching farmers and processors in developing countries (Fair Trade Advocacy Office et al., 2022). In this context, suppliers often have to accept orders that do not even cover their production costs, agree to unilateral changes in terms, or accept bad payment terms.

Against this background, several EU Member States have implemented national rules on UTPs in separate legislation, within their competition laws, or in their civil code (Cafaggi and lamiceli, 2019, 2018; Falkowski et al., 2017). With many variants, the UTP legislation renders certain contract terms ineffective, either automatically or because they fail a reasonableness test.

At the EU level, Directive 2019/633 on unfair trading practices in the agricultural and food supply chain (hereafter, EU UTP Directive) prohibits specific types of "unfair" business practices (Daskalova, 2020, 2019). It contains a "grey list" of contract terms which may be regarded as unfair, and a "black list" of terms which are automatically void. While such UTP rules do not regulate prices directly, they may importantly determine the way prices are negotiated and set (Daskalova, 2020). The UTP Directive also applies to suppliers and buyers located outside the EU, provided that at least one of the parties is based in the EU.

Some EU Member States have gone one step further by introducing a ban on buying below production cost when transposing the UTP Directive into their national law (Fair Trade Advocacy Office et al., 2022, pp. 48–49). For example, the Spanish transposition law includes a prohibition to buy below production costs. Every operator has to pay the preceding operator a price equal to or higher than the cost of production incurred by that operator.

In light of these developments, civil society organizations and representatives of cocoa farmers are urging policymakers in consuming countries to include a prohibition against purchasing commodities below the costs of sustainable production in their UTP laws (Reseau Ivoirien de Commerce Equitable (RICE) et al., 2023). Cocoa procurement at prices below sustainable production costs would trigger UTP law in the buyer country, rendering the contractual price terms ineffective and prompting possible remedies.

⁷ Grey unfair trading practices are allowed only if agreed beforehand in a clear and unambiguous manner. They include six practices: return of unsold products; payment of the supplier for stocking, display, and listing; payment of the supplier for promotion; payment of the supplier for marketing; payment of the supplier for advertising; payment of the supplier for staff of the buyer, fitting out premises.

⁸ The Directive prohibits ten "black" unfair trading practices: payments later than 30 days for perishable agricultural and food products; payment later than 60 days for other agri-food products; short-notice cancellations of perishable agri-food products; unilateral contract changes by the buyer; payments not related to a specific transaction; risk of loss and deterioration transferred to the supplier; refusal of a written confirmation of a supply agreement by the buyer, despite request from the supplier; misuse of trade secrets by the buyer; commercial retaliation by the buyer; transferring the costs of examining customer complaints to the supplier.

By introducing a ban on purchases below production cost, UTP law would serve as **an important legal lever to steer the price formation process towards a cost-plus model**. Additionally, UTP rules would help counter the tendency to disproportionately pass on the costs of complying with the EUDR, CSDDD, and other sustainability requirements onto farmers. Unlike similar measures imposed by producing countries, buyers in Europe could not circumvent the rule by diverting sourcing because they would be required to follow the home country rule.

In practice, implementing a similar rule would present significant challenges. We can imagine a hypothetical scenario in which buying cocoa at below production costs amounts to a UTP under European (EU/Swiss) law. Let us assume that, as under the UTP Directive, the protection regime also extends to farmers who are located outside Europe, provided the buyer of the agricultural goods is located in Europe. Enforcing such a prohibition would raise several questions, including issues of legal standing and agency, the extraterritorial reach of designated authorities in Europe, and the potential for remedial action. Additionally, concerns would arise regarding the cost benchmarks to be applied, their mandatory use in contracts, and broader implications for contract law. An overview of the complex matters at stake, along with options for addressing them, is provided in the table below.

Table 5: Using UTP rules to enforce a cost-plus model: Implementation challenges and options to address them

Issues	Challenges	Options
Legal standing (supply relation- ships covered)	UTP rules generally only protect suppliers who have a direct supply relationship (contract) with the international buyer. In the case of cocoa purchases, cocoa farmers or their cooperatives would only be protected if they sell directly to overseas buyers, which is not typically the case.	Combine the UTP regime with a due diligence regime. International buyers would have a due diligence obligation to ensure that their suppliers purchase cocoa at above production costs. This would require traceability systems, combined with contractual assurances and contractual cascading provisions. The complexities of these requirements are discussed in section 4.3.1.
Agency	Cocoa farmers would need to file a complaint with the authorities of the European state in which the buyer is located. However, cocoa farmers are often widely dispersed/fragmented, poor, and disempowered, and they may be in trust-based relationships with traders/consolidators that collect at farmgate. They may not have the necessary information or legal support to contact the enforcement authority of the country where their buyer is located. Fear of commercial retaliation and the financial risks associated with litigation may also prevent vulnerable stakeholders from exercising their rights.	 Outreach: European enforcement authorities could proactively engage with supplier associations in non-EU countries, raise awareness, and effectively communicate the procedure for submitting complaints under the UTP framework (Wills et al., 2019). Fast-tracked, confidential online submissions: It is essential to offer secure online complaint submission options that are both cost-effective and confidential. Complaint "on behalf of": As under the EU UTP Directive, producer organizations or NGOs have the right to submit a complaint to the designated enforcement authority "on behalf of" farmers. "Own initiative" options: As stipulated under the EU UTP Directive, the designated authority in Europe is entitled to launch investigations on its own initiative, including on the basis of anonymous tips.
Enforcement (extraterritorial power of designated compe- tent authorities)	The authorities designated to enforce the European ban on buying at below production costs would be situated in Europe. These authorities would need to exercise their enforcement powers (investigate, terminate conduct) in respect of conduct that occurs abroad (trans-border infringement).	Enforcement authorities in Europe can strengthen cooperation with sectoral regulators in non-EU countries (Wills et al., 2019). In the cocoa sector, this would entail close collaboration with sectoral authorities that oversee the cocoa sector in producing countries, particularly when they also address competition issues within the sector.

Remedies	Most EU Member States that implement the EU UTP Directive impose administrative sanctions (fines) on the infringing party (the buyer). These sanctions would not directly benefit aggrieved cocoa farmers in producing countries. Civil remedies, such as nullifying contract terms or providing compensation to farmers, are more pertinent but are rarely addressed in UTP regulations (European Commission, 2021). Victims may need to pursue civil remedies through separate judicial proceedings in addition to the UTP administrative process.	UTP enforcement mechanisms in Europe can provide for specific rules of coordination between administrative and judicial authorities, particularly as regards access to civil remedies.
Cost benchmarks	A prohibition on purchasing cocoa below production costs raises questions about which methods should be used for reference values and benchmarks, such as average costs or efficient producer costs.	The prohibition could be accompanied by mechanisms to develop cost benchmarks and indexes. The EGalim laws provide insights in this regard.
Other contract law issues	The contracting parties could circumvent the UTP prohibition by subjecting their sales contract to the law of a country that does not regulate price terms and purchasing practices. Since the contracting parties are free to choose the law that governs the contract, a buyer can require a supplier to select a law that does not restrict unfair purchasing practices.	To prevent legal evasion, UTP provisions can have the character of overriding mandatory rules that cannot be modified or overridden by contract or by electing a more favourable applicable law or jurisdiction. A model clause is Article L444-1 A of the French commercial code, introduced by the EGalim laws.

4.3.3 Mandatory contractual mechanisms downstream

While much attention has been paid to the cocoa purchasing practices of international traders and manufacturers, there has been little discussion regarding pricing practices of retailers in consuming countries that may still have a significant impact upstream on cocoa buying practices. As discussed below, they include two issues that intersect contract/commercial and competition laws: downward price pressures from retail alliances and margin escalation in relation to Fairtrade premiums. In theory, some of the legal innovations introduced by the EGalim laws carry significant breakthrough potential in these areas. Two targeted reforms may bear structural significance in cocoa: the (i) so-called "non-negotiability" of the agricultural raw material content in food products; and (ii) a proposal for regulated margins for certified products. However, the complexity of their implementation and the associated regulatory compliance costs appear to have significantly hindered their transformative impact to date.

Non-negotiability of the agricultural raw material content

As mentioned, the EGalim laws devise and pilot legal innovations in contract and commercial law to address structural power imbalance in food and agricultural chains (Box 8). The law also includes some provisions that affect downstream business relations between retailers and their suppliers. In particular, EGalim 2 stipulates that price negotiations between food suppliers and retailers in France cannot cover the part of the supplier's price corresponding to the cost of the agricultural raw material contained in the food product. The objective is to preserve the share of agricultural commodities in the evolution of industrial prices. The prohibition applies even if the contract is negotiated by purchasing offices outside France and even if the commodity is produced in a third country. A new article in the French commercial code mandates the primacy of French law and French courts over all sales contracts between distributors and suppliers concerning products sold in France, regardless of where the contract is negotiated.⁹

⁹ Article L444-1 A of the French commercial code.

While this innovation could theoretically have a significant impact in countering distributors' price pressures on suppliers and their cascading effects along the value chain, its practical relevance and effectiveness is significantly hindered by the complexities involved. One major challenge is determining the portion of the price that relates to agricultural commodities (Kirsch, 2024). There is also a risk of evasion if retailers transfer price pressure to the negotiable part of the price.

Regulated margins in certified products

EGalim 3 envisages the publication of a feasibility study to establish a framework for controlling distribution margins on products with quality and origin identification labels. The goal is to ensure that these products are not sold at higher margins than those applied for conventional products.¹⁰

This proposal has specific implications for the ethical segment (certified fair/organic) of the chocolate market. In European retail markets, the prices of Fairtrade chocolate exceed the fixed costs of the Fairtrade minimum price and premium, beyond conventional retail margins (Aidenvironment and Sustainable Food Lab, 2018, p. 16). This indicates some "margin escalation" of Fairtrade price differentials and premiums along the chain. Retailers add a margin percentage higher than the one applied to conventional products on the procurement price of organic/Fairtrade-certified products (ibid). This reflects pure economic dynamics: consumer demand for ethical chocolate products is price inelastic (it remains steady even if prices increase) compared to the demand for lower-end chocolate products, which is very elastic (see, for example, Hainmueller et al., 2011). Therefore, in the ethical segment of the market, businesses can impose higher mark-ups. These dynamics limit opportunities for ethical products whose prices could be lower and could cater to a wider range of consumers.

In theory, EGalim-type innovations have the potential to destabilize entrenched business dynamics that lead to sub-optimal outcomes. However, there are questions about their practical relevance and effectiveness, considering their overly complex requirements that do not align with business practices and market realities.

4.3.4 Easing competition law hurdles

The sections above refer to key levers – targeted regulatory reforms – that could strategically reorient business towards more sustainable purchasing practices in cocoa. This section focuses on the paramount condition for this to occur: the need to clarify consuming countries' competition law to provide a safe harbour for living income initiatives.

Companies and industry associations may be hesitant to collaborate on living income due to the perceived risk of violating competition laws. The issue at hand is the uncertainty surrounding the legal assessment of living income initiatives under competition laws in the EU, its Member States, and Switzerland. To illustrate, we can imagine a situation where European cocoa grinders/traders want to cooperate to achieve living income goals in cocoa purchasing practices. Their cooperation may involve sharing (commercially sensitive) information about future conduct related to prices and quantities. Exchanging this information would facilitate the coordination of market behaviour around purchase prices and other trading conditions. The goal would be to overcome free-rider problems/first-mover disadvantages and collaboratively improve farmgate prices in producing countries. How would such initiatives be assessed vis-à-vis competition law? What are the main competition concerns associated with living income initiatives? The legal landscape is still quite unclear. As a result, constructive discussions on this topic are being prevented. Participants who are risk-averse or unwilling to engage may object to the disclosure of commercially sensitive information by others during meetings, publicly distance themselves from the exchange, and even report possible violations of competition law to authorities.

 $^{^{10}}$ Art. 6 of Law 2023-221 of 30 March 2023.

¹¹ The exchange may occur unilaterally, bilaterally, or in a multilateral multi-stakeholder setting.

A rather crude assessment is that price-focused living income initiatives will likely violate competition law. Under EU law, if businesses collude on important competition parameters such as purchase or selling prices, they may restrict competition "by object" within the meaning of Article 101(1) of the Treaty on the Functioning of the European Union (TFEU). Such behaviour may even be considered a "buyer cartel". Accordingly, exchanging information between competitors with the aim of coordinating living income purchase prices could be seen as restricting competition by its very nature, without the need to assess actual or potential effects on competition.

However, the viewpoint above fails to consider two significant aspects.

First, it is important to keep in mind that EU competition law only addresses anticompetitive practices (wherever they occur) that impact European consumers and European actors. Living income initiatives are subject to EU law provided they restrict competition in the internal (EU) market and affect trade between EU Member States. The same principles apply to Switzerland.

Second, it is important to acknowledge major ongoing efforts to incorporate sustainability concerns into EU competition law. There are ongoing developments under three strands of work: (1) the draft revised (2023) Guidelines on the applicability of Article 101 of the TFEU to horizontal co-operation agreement (revised horizontal Guidelines); (2) the new derogation introduced by Article 210a of the Common Market Organization Regulation (1308/2013) and related guidelines, exempting producer sustainability agreements in agriculture from EU competition law; and (3) the new Vertical Block Exemption Regulation (VBER; Commission Regulation [EU] 2022/720) and the related Guidelines on Vertical Restraints. Altogether, these developments are intended to mainstream sustainability and public interest concerns in EU competition law. The draft revised horizontal Guidelines explicitly include ensuring living income as a legitimate sustainability objective and provide instructions for assessing sustainability initiatives (including living income initiatives) under competition law.

To sum up, it is incorrect to claim that price discussion/concertation in the context of living income initiatives do not raise competition law issues; they do raise sensitive issues that require thorough assessment. However, it is likewise incorrect to claim that living income initiatives violate competition law by their very nature. Ongoing developments in EU law suggest a more lenient approach than in the past towards the assessment of sustainability initiatives under competition law. Seeking further guidance from the European Commission and relevant national authorities is crucial to provide safe harbour rules for living income initiatives.

5 Conclusion

By combining analysis of private pricing schemes at the micro and meso level (voluntary self-regulation) together with policy options at the macro level (state regulation), we can identify several important areas for further investigation and potential policy actions.

Both regulatory approaches to pricing – private self-regulation by enterprises and supply chains versus state regulation – have limitations. Private schemes have the advantage of being flexible and particularistic, tailored to various industry structures and motivations. They allow for the testing of governance innovations, especially in the context of unconventional pricing models. However, they struggle with scalability in the absence of an enabling environment that incentivizes the internalization of social and environmental costs. On the other hand, public price regulations, whether direct or indirect, involve more general rules that can support level playing fields and innovation on a larger scale. However, they are either untargeted or overly complex in their attempt at particularization and generally include significant drawbacks, such as inefficiencies and policy spillovers. When regulations become overly complex or disconnected from business realities, they generally backfire.

One way to address these shortcomings is to work "more creatively with the interplay between private and public regulation" (Ayres and Braithwaite, 1995, p. 4). This can be done through less intrusive, more delegated methods of market regulation. Private-sector innovations and public regulations are already closely intertwined and entangled. Supply chain laws such as the EUDR and CSDDD include provisions that almost inevitably fall back on private schemes to either "fill in the details" or provide practical solutions for implementing abstract requirements. We recommend articulating this interaction between public and private regulation more explicitly while also addressing the risk of regulatory capture.

One possible approach to achieve this is through coregulation in a tripartite process, or "tripartism" (Ayres & Braithwaite, 1995, pp. 54–100). In this approach, regulators would co-define with industry stakeholders the most cost-effective ways to implement sustainability pricing schemes in cocoa. This could involve reassessing the regulatory schemes discussed in this report to reduce inefficiencies, minimize spillover effects, and lower compliance costs while maintaining their fundamental principles. However, fostering constructive engagement and cooperation between regulators and industry – such as through regular meetings – can increase the risk of regulatory capture. To mitigate this risk, tripartism envisages the involvement of a reputable, contestable third party to oversee the regulator. In this tripartite model, the third party – whether an academic or a public interest group – could participate in negotiations, have access to all information available to the regulator, and have the capacity to initiate legal action if necessary. The risk of this third party being captured is reduced by its contestable nature, provided there is sufficient peer pressure and competition among various groups willing to assume the third-party role.

A related option is "enforced self-regulation", where the regulator requires businesses to set and implement their own internal rules and procedures to fulfil the regulator's policy objectives (Braithwaite, 1982; Fairman and Yapp, 2005). The standards that must be achieved are determined by the regulator, but the regulated industry is left ample discretion as to how to achieve that result – which provides room for particularistic sets of rules attuned to specific circumstances. This regulatory approach is commonly used in various areas of risk regulation. It is worth exploring whether it could be used to promote living income for farmers in the most cost-effective way.

From an institutional perspective, these approaches leverage mixes of private and public regulation, along with transnational and transdisciplinary alliances. This shift moves regulatory discussions to multi-stakeholder platforms that promote checks and balances. Examples include tripartite structures involving research, government, and business, such as the National Initiatives on Sustainable Cocoa (ISCO) in Europe or ICCO's Consultative Board on the World Cocoa Economy. Another example is ISEAL with regard to sustainability standards and certification.

In substantive terms, this approach encourages us to move past the stalemate between supporters of free markets and those in favour of state regulation. The goal of this mix of regulatory strategies is not to tame the market, but rather to tackle market imperfections and failures that lead to unsustainable outcomes. Examples of market failure are unfair contract terms and abusively low prices that reflect unequal bargaining power and lack of livelihood alternatives for producers, or unsustainably low prices that do not factor in the costs of deforestation, of child labour, or of tackling unsustainability problems – e.g. the costs of complying with regulations. Through coregulation and enforced self-regulation, the goal is to address these externalities by integrating sustainability into price dynamics. Market-oriented competition would remain, focusing especially on improving efficiency in sustainable practices, product quality, branding, etc. – but not on value extraction from the neediest. With this objective in mind, the interplay between public and private regulation offers an opportunity to identify and act on key levers for change. For example, rather than delinking prices from price benchmarks, a key lever would be to incorporate sustainability factors into how these benchmarks are determined (Hütz-Adams and Oxfam, 2024). A relevant example is the Intercontinental Exchange (ICE), which has various powers under its rulebook that allow for amendments to contract rules. The ICE has shown openness to integrating sustainability factors into cocoa futures contract specifications (ICE Futures Europe, 2023a, 2023b), a shift motivated by the EUDR. The idea aligns with broader public-private efforts to redefine value in business by integrating sustainability into impact accounting (see, for example, Impact Economy Foundation, n.d.) and consumer price methodologies (e.g. "true prices" methodologies).

Finally, this blend of regulatory approaches offers a means to address the need for context-specific solutions that are tailored to the unique circumstances of different cases. As discussed in Chapter 2, the relationship between prices, living income, and sustainability is complex and nonlinear, involving intricate feedback loops and unintended effects. Therefore, it is necessary to have flexible and particularistic sets of rules that focus on those in greatest need and adapt to varying business dynamics. This involves delegating regulatory responsibilities to firms and industry associations, but within the parameters set by public regulation.

The way forward may involve testing this approach by leveraging the convening capacity of multi-stakeholder cocoa platforms and initiatives.

 Table 6: Overview of past efforts at stabilizing cocoa prices and the effects of price instability (In green, non-interventionist approaches [more recent])

	<u> </u>											лизс арргс			
			International Cocoa Agreement, 1972	International Cocoa Agreement, 1975	International Cocoa Agreement, 1980	International Cocoa Agreement, 1986	IMF Compensatory Financing Facility (CFF)	IMF Contingency and Compensatory Financing Facility (CCFF)	European Communities' Stabilization of Export Earnings (STABEX) scheme	Marketing boards in former British colonies (Nigeria, Cameroon, Ghana)	Caisses de stabilisation in former French African colonies	Payments based on input used (e.g. subsidies reducing the costs of inputs)	Insurance tools, including weather index products	Hedging instruments/ commodity derivatives (futures and options)	Social protection instruments (e.g. pension schemes)
Prices	International		Х	Х	Х	Х	Х	Х	Х						
	Export prices (FoB)														
	Farmgate prices														
	Support									Х	Χ				
Price objective	Stabilization	Intra Year	Х	Х	Х	Х	Х	Х	Х	(x)	(x)				
Pri obje		Intra Year	Х	Х	Х	Х				Х	Х				
	Manage prices		Х	Х	Х	Х									
oach	Manage effects of price changes		Х	Х	Х	Х	Х	Х	Х						
Approach	Multilateral						Х	Х	Х				Х	Х	Х
of nent	Regional/ plurilateral Bilateral														
Type of instrument	Unilateral									X	Х	Х			Х
	Private												Х	X	Х
	Direct price regulation									х	X				
	Premium														
Policy tool(s) used	Regulated margins									Х	Χ				
	Production/export quotas		х	Х							Х				
	Buffer funds/stock management		x	Х	х	Х									
	State trading/statutory marketing arrangements									х					
	Auctioning/licensing										Х				
	Compensatory finance/insurance						Х	Х	Х						
	Other subsidies											Х			

Acknowledgements

We gratefully acknowledge the critical and constructive feedback of the members of the sounding group and participants at the World Cocoa Conference in Brussels, April 2024. We thank David Bugmann, Paolo Feser, Malou Geerlings, Gesabel Villar, and Diego Zavaleta for their excellent research collaboration and assistance. We are grateful to staff members of the Swiss Platform for Sustainable Cocoa (SWISSCO), the ICCO Secretariat, and Fairtrade Max Havelaar Switzerland for their feedback. This study was co-funded by the Swiss State Secretariat for Economic Affairs (SECO) through SWISSCO; the survey in Chapter 3 belongs to a project funded by the European Research Council (ERC) under the European Union's Horizon 2020 research and innovation programme (COMPASS project, Grant agreement No. 949852); Chapter 4 links to ongoing legal research under the SOR4D project CARE for value and sustainability (Grant 217988).

References

- Aboa, A., 2020. Ivory Coast Struggles to Sell Cocoa amid Dispute over Farmer Premium. Reuters.
- Aboa, A., Angel, M., 2019. Chocolate Makers Hobble Ivory Coast, Ghana Cocoa Premium with Discounts. Reuters.
- Aidenvironment, Sustainable Food Lab, 2018. Pricing Mechanisms in the Cocoa Sector: Options to Reduce Price Volatility and Promote Farmer Value Capture. Aidenvironment and Sustainable Food Lab, Amsterdam.
- Andersen, L.E., Andersen, N.N., Anker, R., Anker, M., 2022. Living Income and Living Wage Report. Rural Areas and Small Towns of Coffee and Cocoa Growing Regions of Cajamarca, Cusco, Junin, and San Martin, Peru (Living Wage Benchmark Series No. 2022- 01–02). Anker Research Institute, Global Living Wage Coalition.
- Anker, R., Anker, M., 2022. Living Income Benchmark, June 2022 Update. Rural Ghana. Cocoa Growing Areas of Ashanti, Central, Eastern, and Western Regions. Living Income Community of Practice.
- Asamoah, M., Ansah, F.O., 2017. Report on Land Tenure & Cocoa Porduction in Ghana: A CRIG/WCF Collaborative Survey. Cocoa Research Institute of Ghana (CRIG).
- Asfaw, S., Mithöfer, D., Waibel, H., 2010. What Impact Are EU Supermarket Standards Having on Developing Countries' Export of High-Value Horticultural Products? Evidence From Kenya. Journal of International Food & Agribusiness Marketing 22, 252–276. https://doi.org/10.1080/08974431003641398
- Autorità Garante della Concorrenza e del Mercato, 2013. Indagine conoscitiva sul settore della GDO IC43. Autorità Garante della Concorrenza e del Mercato.
- Autorité de la concurrence, 2020. The Autorité Issues a New Decision Concerning Purchasing Offices and Makes the Commitments Made by Carrefour and Tesco Binding.
- Autorité de la concurrence, 2018. 16 July 2018: Joint Purchasing Agreements in the Food Retail Market Sector.
- Autorité de la concurrence, 2015. Avis 15-A-06 du 31 mars 2015 relatif au rapprochement des centrales d'achat et de référencement dans le secteur de la grande distribution.
- Ayres, I., Braithwaite, J., 1995. Responsive Regulation: Transcending the Deregulation Debate. Oxford University Press, New York.
- Barry Callebaut AG, Fairtrade International, Fair Trade Advocacy Office, Ferrero, International Cocoa Initiative, Mars Wrigley, Mondelēz International, Nestlé, Rainforest Alliance, Tony's Chocolonely, Unilever, VOICE Network, 2019. Joint Position Paper on the EU's Policy and Regulatory Approach to Cocoa.
- Boysen, O., Ferrari, E., Nechifor, N., Tillie, P., 2021. Impacts of the Cocoa Living Income Differential Policy in Ghana and Côte d'Ivoire (Science for Policy report No. EUR 30812 EN). Joint Research Centre (JRC), the European Commission.
- Boysen, O., Ferrari, E., Nechifor, V., Tillie, P., 2023. Earn a Living? What the Côte D'ivoire—Ghana Cocoa Living Income Differential Might Deliver on Its Promise. Food Policy 114, 102389. https://doi.org/10.1016/j.food-pol.2022.102389
- Brack, D., 2020. Promoting Living Income in the Cocoa Sector: Policy Options for Consuming Countries. Fairtrade International.
- Braithwaite, J., 1982. Enforced Self-Regulation: A New Strategy for Corporate Crime Control. Michigan Law Review 80, 1466–1507.
- Brown, O., Gibson, J., 2006. Boom or Bust: Developing Countries' Rough Ride on the Commodity Price Rollercoaster. International Institute for Sustainable Development (IISD).
- Brülisauer, S., Villar, G., Oberlack, C., Forthcoming. Sustainability Governance Diversifies: Unpacking Private-Sector Governance Strategies in Coffee and Cocoa Value chains.
- Bundeskartellamt, 2014. Sektoruntersuchung Nachfragemacht Im Lebensmitteleinzelhandel (2014) B2-15/11 BKart A.
- Bymolt, R., Laven, A., Tyszler, M., 2018. Demystifying the Cocoa Sector in Ghana and Côte d'Ivoire. Chapter 11, Cocoa Marketing and Prices. The Royal Tropical Institute (KIT).
- Cacao: la tribune des acteurs du commerce équitable [WWW Document], 2021. Ethiquable.

 URL https://www.ethiquable.coop/page-dactualites-mag/cacao-tribune-acteurs-commerce-equitable (accessed 1.22.25).
- CacaoNet, n.d. Where We Are Today: Global Network for Cacao Genetic Resources [WWW Document]. URL htt-ps://www.cacaonet.org/global-strategy/where-we-are-today (accessed 6.18.24).
- Cafaggi, F., Iamiceli, P., 2019. Unfair Trading Practices in Food Supply Chains. Regulatory Responses and Institutional Alternatives in the Light of the New EU Directive (SSRN Scholarly Paper No. ID 3380355). Social Science Research Network, Rochester, NY. https://doi.org/10.2139/ssrn.3380355

- Cafaggi, F., Iamiceli, P., 2018. Unfair Trading Practices in the Business-to-business Retail Supply Chain: An Overview on EU Member States Legislation and Enforcement Mechanisms (JRC Technical Reports No. JRC112654). European Commission, Joint Research Centre.
- Côte d'Ivoire CCC (Conseil du Cafö et Cacao), Ghana COCOBOD, 2019. Implementation of Living Income Differential by Côte d'Ivoire and Ghana.
- Daskalova, V., 2020. Regulating Unfair Trading Practices in the EU Agri-food Supply Chain: A Case of Counterproductive Regulation? Yearbook of Antitrust and Regulatory Studies 13, 7–53. https://doi.org/10.7172/1689-9024.YARS.2020.13.21.1
- Daskalova, V., 2019. The New Directive on Unfair Trading Practices in Food and EU Competition Law: Complementary or Divergent Normative Frameworks? Journal of European Competition Law & Practice 10, 281–296. https://doi.org/10.1093/jeclap/lpz032
- Delpech, X., 2021. EGalim 2 : une nouvelle loi visant à protéger la rémunération des agriculteurs. Dallloz Actualité. EGalim 1, 2018.

EGalim 2, 2021.

- European Commission, 2021. Report from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions on the state of the transposition and implementation of Directive (EU) 2019/633 of the European Parliament and of the Council of 17 April 2019 on unfair trading practices in business-to-business relationships in the agricultural and food supply chain (No. COM(2021) 652 final). Brussels.
- European Commission, 2019. The Directive on unfair trading practices in the agricultural and food supply chain. European Union.
- Fair Trade Advocacy Office, 2019. Competition Law and Sustainability in Food Systems: Addressing the Broken Links (Briefing Note). FTAO, Brussels.
- Fair Trade Advocacy Office, Hänke, H., Sustainable Food Lab, Living Income Community of Practice, 2022. The Role of Governments in Enabling Living Income in Global Agriculture Value Chains: Guidance for public policy makers
- Fairman, R., Yapp, C., 2005. Enforced Self-Regulation, Prescription, and Conception of Compliance within Small Business: The Impact of Enforcement. Law & Pol'y 27, 491–519.
- Fairtrade International, Fair Trade Advocacy Office, Ferrero, International Cocoa Initiative, Mars Wrigley, Mondelēz International, Nestlé, Rainforest Alliance, Tony's Chocolonely, VOICE Network, 2021. Joint Position Paper on the EU's Policy and Regulatory Approach to Cocoa Human Rights and Environmental Due Diligence.
- Falkowski, J., Ménard, C., Sexton, R.J., Swinnen, J., Vandevelde, S., 2017. Unfair Trading Practices in the Food Supply Chain: A Literature Review on Methodologies, Impacts and Regulatory Aspects (JRC Technical Report). European Commission, Joint Research Centre.
- FAO, BASIC, 2020. Comparative Study on the Distribution of Value in European Chocolate Chains: Executive Summary. Food and Agriculture Organization of the United Nations and Bureau d'analyse sociétale pour une information citoyenne, Paris.
- Ferro, G., Groothuis, L., 2022. Entering the Swiss Market for Cocoa.
- Fountain, A.C., 2023. Good Purchasing Practices, a Cocoa Barometer Consultation Paper. VOICE Network.
- Fountain, A.C., Huetz-Adams, F., 2022. Cocoa Barometer 2022.
- Fountain, A.C., Huetz-Adams, F., 2020. Cocoa Barometer 2020.
- Fountain, A.C., Huetz-Adams, F., 2015. Cocoa Barometer 2015.
- Galtier, F., 2012. Gérer l'instabilité des prix alimentaires. Des solutions différentes pour le Nord, pour le Sud et pour les marchés internationaux. Revue Tiers Monde 211, 51–70. https://doi.org/10.3917/rtm.211.0051
- Gariepy, R.N., 1976. International Commodity Agreements. The International and Comparative Law Quarterly 25, 677–684.
- Gavrilets, S., 2015. Collective Action Problem in Heterogeneous Groups. Philosophical Transactions of the Royal Society B: Biological Sciences 370, 20150016. https://doi.org/10.1098/rstb.2015.0016
- Gayi, S.K., 2022. Supply Management in the Cocoa Sector: An Exploratory Study (No. Supply Mgt COCOA (ICCO) Final Draft). ICCO.
- Ghana COCOBOD, 2023. Turaround Strategy Paper.
- Ghana COCOBOD, 2022a. Ghana, Côte d'Ivoire Agree on Measures to Tackle Country Origin Differential Erosion [WWW Document]. URL https://cocobod.gh/news/ghana-c%C3%B4te-divoire-agree-on-measures-to-tackle-country-origin-differential-erosion (accessed 1.22.25).

- Ghana COCOBOD, 2022b. Ghana, Côte d'Ivoire Take Steps to Reinforce LID and Farmer Welfare Improvement Agenda [WWW Document]. URL https://cocobod.gh/news/ghana-c%C3%B4te-divoire-take-steps-to-reinforce-lid-and-farmer-welfare-improvement-agenda (accessed 1.22.25).
- Ghana COCOBOD, Swiss Platform for Sustainable Cocoa, Research Institute of Organic Agriculture (FiBL), 2024. Income Study of Cocoa Production Household in Ghana: An Evaluation of Household Income, Living Income Gaps, and the Contribution of Sustainable Interventions on Cocoa Farming Households Income Situations.
- Gilbert, C., 2011. International Agreements for Commodity Price Stabilisation: An Assessment (OECD Food, Agriculture and Fisheries Papers No. 53). OECD.
- Gilbert, C., 2006. Value Chain Analysis and Market Power in Commodity Processing with Application to the Cocoa and Coffee Sectors. Department of Economics, University of Trento, Italia, Department of Economics Working Papers.
- Gilbert, C.L., 1996. International Commodity Agreements: An Obituary Notice. World Development 24, 1–19. https://doi.org/10.1016/0305-750X(95)00121-R
- Gilbert, C.L., 1987. International Commodity Agreements: Design and Performance. World Development 15, 591–616. https://doi.org/10.1016/0305-750X(87)90005-2
- Gneiting, U., Arhin, A., 2023. Towards a Living Income for Cocoa Farmers in Ghana: Assessing Companies' Efforts to Date. Oxfam International.
- Grabosky, P.N., 1995. Counterproductive Regulation. International Journal of the Sociology of Law 23, 347–369. https://doi.org/10.1016/S0194-6595(05)80003-6
- Grumiller, J., Grohs, H., 2022. Sustainability in the Cocoa-Chocolate Global Value Chain: From Voluntary Initiatives to Binding Rules? (Research Report No. 39/2022). ÖFSE Policy Note.
- Habraken, R., Diallo, O., Lisa de Graaf, Kuijpers, R., 2023. Living Income and Child Labour in the Cocoa Sector of Côte d'Ivoire (KIT Working Paper).
- Hainmueller, J., Hiscox, M., Sequeira, S., 2011. Consumer Demand for the Fair Trade Label: Evidence from a Field Experiment. Review of Economics and Statistics 97. https://doi.org/10.2139/ssrn.1801942
- Hütz-Adams, F., Oxfam, 2024. The Living Income Differential for Cocoa: Futures Markets and Price Setting in an Unequal Value Chain. Oxfam België/Belgique.
- Hütz-Adams, F., Schneeweiß, A., 2018. Pricing in the Cocoa Value Chain Causes and Effects. Deutsche Gesellschaft für, Internationale Zusammenarbeit (GIZ) GmbH, Bonn, Germany.
- ICCO, 2024. Cocoa Market Review September 2024.
- ICCO, 2021. Concept Note on Supply Management Policies (No. CB/41/2/Rev.1). ICCO Working Group on Supply Management.
- ICE Futures Europe, 2023a. Circular 23/030. London Cocoa and Robusta Coffee Futures Contracts potential implications of the proposed EU regulation 2021/0366(COD) relating to 'certain commodities and products associated with deforestation.'
- ICE Futures Europe, 2023b. Circular 23/140. London Cocoa Futures Contract update on potential Contract Rule amendments in response to the European Deforestation Regulation.
- IDH, n.d. A Living Income for Cocoa Farmers in Côte d'Ivoire [WWW Document]. URL https://www.idhsustainable-trade.com/project/a-living-income-for-cocoa-farmers-in-cote-divoire/ (accessed 6.18.24).
- Impact Economy Foundation, n.d. The Impact-Weighted Accounts Framework [WWW Document]. Impact Economy Foundation. URL https://impacteconomyfoundation.org/impactweightedaccountsframework/ (accessed 3 11 25)
- Ivorian Center for Socio Economic Research, 2018. Living Income Report. Rural Côte d'Ivoire. Cocoa growing areas.
- Khan, K.-R., 1982. The law and Organisation of International Commodity Agreements. Martinus Nijhoff Publishers, The Netherlands.
- Kiewisch, M., Waarts, Y., 2020. No Silver Bullets: Closing the \$10 billion Income Gap in Cocoa Calls for Cross-sector Action. Executive Summary Paper. Wageningen University & Research.
- Kirsch, A., 2024. Note de cadrage Repenser la création et le partage de la valeur. Agriculture Stratégies.
- Kliemann, C., 2022. Who to blame? The rough start for living income cocoa prices in Côte d'Ivoire and Ghana. Debating Development Research. URL https://www.developmentresearch.eu/?p=1252 (accessed 1.22.25).
- Kuhn, M., Tennhardt, L., Lazzarini, G.A., 2023. Gender Inequality in the Cocoa Supply Chain: Evidence from Smallholder Production in Ecuador and Uganda. World Development Sustainability 2, 100034. https://doi.org/10.1016/j.wds.2022.100034

- Living Income Community of Practice, n.d. Measuring Living Income [WWW Document]. URL https://www.living-income.com/the-concept/measurement (accessed 6.18.24).
- Maeder, M., Evert, T., Villar, R., Ramirez, M., Fünfgeld, H., Oberlack, C., 2024. Tackling Gender Inequality in Community-Based Organizations: The Contribution of Cacao Cooperatives to Environmental Justice for Women in Peru. International Journal of the Commons.
- Ministère de l'Agriculture et de la Souveraineté alimentaire, n.d. EGalim 2 : pour une meilleure rémunération des agriculteurs [WWW Document]. Ministère de l'Agriculture et de la Souveraineté alimentaire. URL https://agriculture.gouv.fr/egalim-2-pour-une-meilleure-remuneration-des-agriculteurs (accessed 5.16.23).
- MordorIntelligence, n.d. Chocolate Market Trends [WWW Document].

 URL https://www.mordorintelligence.com/industry-reports/chocolate-market/market-trends (accessed 6.20.24).
- Musselli, I., 2017. Agriculture, Price Stabilisation and Trade Rules: A Principled Approach. Brill | Nijhoff, The Netherlands.
- OECD, 2024. Climate Finance Provided and Mobilised by Developed Countries in 2013-2022.
- Oomes, N., Tieben, B., Laven, A., Ammerlaan, T., Appelman, R., Biesenbeek, C., Buunk, E., 2016. Market Concentration and Price Formation in the Global Cocoa Value Chain: Final Report. Amsterdam.
- Prates, I., Anker, R., Martha Anker, 2020. Living Income, August 2020 Update. Rural Côte d'Ivoire. Cocoa growing areas. Living Income Community of Practice.
- Rangarajan, L.N., 1983. Commodity Conflict Revisited: From Nairobi to Belgrade. Third World Quarterly 5, 586-609.
- Reseau Ivoirien de Commerce Equitable (RICE), Association des Presidents du Coopératives de Café et Cacao (ASPCACC), CANAAN, ABOCFA, ASUNAFO, CAKIB, CAUD, COOP-CA-CAPRESSA, CEAA, 2023. Cocoa Producers' Summit on Living Income: Declaration.
- Reynolds, P.D., 1978. International commodity agreements and the Common Fund: A legal and financial analysis.

 Praeger.
- Rowe, J.W.F., 1965. Primary Commodities in International Trade, 1st edition. ed. Cambridge University Press.
- Smith, S., Sarpong, D., 2018. Living Income Report. Rural Ghana. Cocoa growing areas of Ashanti, Central, Eastern, and Western Regions (No. Series 1, Report 1). Living Income Community of Practice.
- Staritz, C., Tröster, B., Grumiller, J., Maile, F., 2023. Price-Setting Power in Global Value Chains: The Cases of Price Stabilisation in the Cocoa Sectors in Côte d'Ivoire and Ghana. Eur J Dev Res 35, 840–868. https://doi.org/10.1057/s41287-022-00543-z
- Swiss Platform for Sustainable Cocoa, 2024. The Cocoa Price: A Key Factor for a Living Income for Farmers (SWISSCO Issue Brief No. 2024/1).
- UK Competition Commission, 2008. The Supply of Groceries in the UK Market Investigation.
- ul Haque, I., 2007. Commodities under Neoliberalism: The Case of Cocoa (G-24 Discussion Paper Series No. 25). United Nations, Geneva and New York.
- van der Haar, S., Janssen, V., Diallo, O., Boza, F., Diarra, I., Ingram, V., Kouadio, K., Laven, A., N'dri, A., N'guessan, A., Waarts, Y., 2024. Cocoa Household Income Study Approach: A Sector-Wide Approach to Assessing the Living Income Status of Households in the Cocoa Sector (Report No. 2024–038). Wageningen Economic Research and Royal Tropical Institute.
- van Vliet, J.A., Slingerland, M.A., Waarts, Y.R., Giller, K.E., 2021. A Living Income for Cocoa Producers in Côte d'Ivoire and Ghana? Frontiers in Sustainable Food Systems 5.
- Voconiq, Square Circle, 2023. Independent Evaluation of the Extractive Industries Transparency Initiative.
- Waarts, Y., Kiewisch, M., 2021. Balancing the Living Income Challenge: Towards a Multi-Actor Approach to Achieving a Living Income for Cocoa Farmers. Wageningen University & Research, Mondelēz International Cocoa Life.
- Waarts, Y.R., Janssen, V., Aryeetey, R., Onduru, D., Heriyanto, D., Aprillya, S.T., N'Guessan, A., Courbois, L., Bakker, D., Ingram, V.J., 2021. Multiple Pathways Towards Achieving a Living Income for Different Types of Smallholder Tree-Crop Commodity Farmers. Food Sec. 13, 1467–1496. https://doi.org/10.1007/s12571-021-01220-5
- Wight, B., Prakash, A., 2011. The Fallacy of Price Interventions: A Note on Price Bands and Managed Tariffs, in: Prakash, A. (Ed.), Safeguarding Food Security in Volatile Global Markets. FAO, Rome, pp. 231–241.
- Wills, T., Schmidt, S., Corbalan, S., Herman, M.-O., 2019. The Unfair Trading Practices Directive: A Transposition and Implementation Guide. Oxfam International, Traidcraft Exchange, SOMO, IFOAM EU Group, Fair Trade Advocacy Office.
- zu Ermgassen, E.K.H.J., Bastos Lima, M.G., Bellfield, H., Dontenville, A., Gardner, T., Godar, J., Heilmayr, R., Indenbaum, R., dos Reis, T.N.P., Ribeiro, V., Abu, I., Szantoi, Z., Meyfroidt, P., 2022. Addressing Indirect Sourcing in Zero Deforestation Commodity Supply Chains. Science Advances 8, eabn3132. https://doi.org/10.1126/sciadv.abn3132

About the Authors

Samuel Bruelisauer is a PhD researcher at the Centre for Development and Environment (CDE) and the Institute of Geography, University of Bern. His dissertation focuses on the sustainability governance of coffee and cacao value chains, in particular how justice can be institutionalized in governance arrangements and how it shapes well-being outcomes in such sectors. Other main areas of focus include cooperatives, social enterprises, and the wider social and solidarity economy, which he studied and worked on in various capacities, including at the United Nations Research Institute for Social Development (UNRISD).

samuel.bruelisaueri@unibe.ch

Irene Musselli is a senior researcher at the Centre for Development and Environment (CDE), University of Bern. Her research interests lie at the intersection of law and economics, focusing on various aspects of commodity trade regulation and natural resource governance. Before joining CDE, Irene spent over ten years working with the United Nations Conference on Trade and Development (UNCTAD), where she was involved in policy analysis, consensus building, and technical cooperation on a wide range of trade and development issues. She holds a PhD in law from the World Trade Institute (WTI) at the University of Bern, a Master of Laws from the London School of Economics and Political Science, and a Master's degree in Cooperation and Development from the University of Pavia.

irene.musselli@unibe.ch

Christoph Oberlack co-leads the Sustainability Governance Impact Area at the Centre for Development and Environment (CDE), University of Bern. His PhD research focused on the institutional dimensions of climate change adaptation, laying the foundation for his ongoing work in sustainable development. Since then, he has led, participated in, and supervised numerous research and development projects across Switzerland, Peru, Myanmar, Laos, Ghana, Côte d'Ivoire, Kenya, Malawi, Madagascar, India, and within the United Nations system. His current work centres on governance strategies for sustainable land use systems and value chains, archetype analysis, and transdisciplinary methods for knowledge co-creation.

christoph.oberlack@unibe.ch

Nicolas Porchet is a social entrepreneur and researcher specializing in social entrepreneurship and sustainable food systems. He is the co-founder of Choba Choba, an award-winning social venture that empowers cocoa farmers to become professional entrepreneurs and co-owners of a chocolate company. Through this work, he has developed deep expertise in social innovation and inclusive business models within agricultural value chains. He holds an MSc in International Development Studies from Wageningen University, with a focus on natural resource governance, as well as an MBA from the Quantic School of Business & Technology. He has extensive field experience across diverse contexts, including Peru, Nepal, and several countries in Africa.

nicolas.porchet@unibe.ch

CDE Working Papers

- 1 EU Trade Agreements and Their Impacts on Human Rights. Study Commissioned by the German Federal Ministry for Economic Cooperation and Development (BMZ). Elisabeth Bürgi Bonanomi. 2014.
- 2 Mit Eco-Drive gegen Strassenlärm. Evaluation eines Interventionsprogramms zur Förderung eines leisen Fahrstils. Stephanie Moser, Maja Fischer, Elisabeth Lauper, Thomas Hammer, Ruth Kaufmann-Hayoz. 2015.
- 3 Challenges and Opportunities in Assessing Sustainable Mountain Development Using the UN Sustainable Development Goals. Christoph Bracher, Susanne Wymann von Dach, Carolina Adler. 2018.
- 4 Curbing Illicit Financial Flows in Commodity Trading: Tax Transparency. Irene Musselli, Elisabeth Bürgi Bonanomi. 2018
- 5 Nachhaltige Regional- und Landschaftsentwicklung in integrativen Grossschutzgebieten: Welche Rolle soll der Kultur beigemessen werden? Thomas Hammer, Marion Leng, Bettina Scharrer. 2020.
- 5A Sustainable regional and landscape development in integrative large-scale protected areas: What role for culture? Thomas Hammer, Marion Leng, Bettina Scharrer. 2020.
- 6 Weniger ist mehr Der dreifache Gewinn einer Reduktion der Erwerbsarbeitszeit. Weniger arbeiten als Transformationsstrategie für eine ökologischere gerechtere und zufriedenere Gesellschaft Implikationen für die Schweiz. Christoph Bader, Hugo Hanbury, Sebastian Neubert, Stephanie Moser. 2020
- 7 Wirkungsmessung Klimagespräche. Sebastian Neubert, Stephanie Moser, Sabin Bieri. 2022.
- 8 Wohlbefinden und Ökologie durch mehr Zeit? Lernen aus der Umsetzung einer Arbeitszeitreduktion im GZO Spital Wetzikon. Moser S, Gurtner L, Bezzola N, Neubert S. 2024.

CDE Working Papers present reflections on sustainable development issues of concer to researchers, development experts, and policymakers around the world.	'n

This working paper aims to enhance understanding of pricing schemes designed to support a living income among cocoa-farming communities. It reviews and synthesizes various pricing mechanisms and explores innovative legal and institutional frameworks to scale up these mechanisms at a macro level. By combining insights from microlevel innovations with macro-level regulatory developments, it lays the groundwork for creative efforts to harness synergies between private and public governance structures.