

cocoa barometer



2022

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Scope and intentions of the 2022 Cocoa Barometer

The 2022 Cocoa Barometer provides an overview of the current sustainability developments in the cocoa sector and highlights critical issues that are not receiving sufficient attention at present, discussing a broad range of social, economic, and environmental issues. It is an endeavour to stimulate and enable stakeholders to communicate and discuss these critical issues. Cross-cutting throughout this document is the observation that we are sorely lacking both quality data and global collaboration to solve the challenges the sector faces.

The content of the 2022 Cocoa Barometer is the result of consultations with civil society in the cocoa producing countries, lengthy conversations within the Cocoa Barometer Consortium, and of much data from cocoa and chocolate companies, collected through an in-depth questionnaire.

Three in-depth studies were released in the run-up to the 2022 Cocoa Barometer, providing focussed discussions on Latin American cocoa production, Living Income, and Transparency & Accountability.

A reader's guide

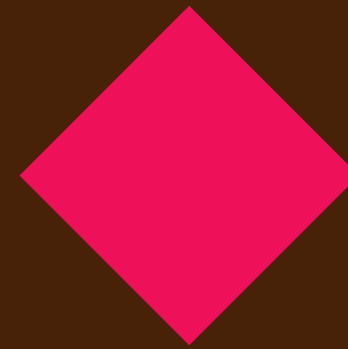
Text in Green: Data from the questionnaire

The large chocolate and cocoa companies were all sent a questionnaire for this Barometer, on a wide range of issues relating to their cocoa sustainability. The text in green boxes such as this one analyses the data submitted by companies. It is important to note that the data provided is self-reported by companies, so it might therefore be subject to bias and interpretation.

Text in pink: definitions and deep dives

Sometimes, a specific issue needs some definition or a deeper dive, in order for the context and importance of a subject to be properly understood. That kind of text can be found in a pink box such as this one.

1. Introduction



Introduction

After two decades of discussions on sustainability in the cocoa sector, the question rises “why haven’t we solved these problems yet?” Indeed, it sometimes feels as if every two years the Cocoa Barometer writes about the same issues. In fact, additionally challenges have been added over the years.

Several interrelated challenges come to the foreground around environmental protection. Deforestation and loss of biodiversity are driven by cocoa production, climate change is both affecting cocoa production and made worse by cocoa-driven deforestation, and agrochemical use is causing both environmental damage and is hazardous to those applying them.

Child labour continues to be a challenge in West African cocoa production, where children are involved in age-inappropriate and hazardous labour. Gender inequality raises barriers for women, both as rightsholders and as agents for change.

The two branches of the cocoa problem tree - environmental protection and human rights - both stand on a tree trunk of farmer poverty. This poverty is exacerbated by the current cost-of-living crisis.

Living income as a concept has become a key objective for the cocoa sector in the past few years, however it hasn’t changed core business activities so far. The Ivorian-Ghanaian government collaboration to drive up market prices is an important step, but so far farm gate prices are nowhere near remunerable.

Too often, sustainability decisions are made far from the reality of cocoa growers. Decisions are made by those in power, ensuring that these decisions are in line with their interests. As such, decades of calls for higher prices have so far not been answered. Instead, approaches have been pursued focussing on what the farmer needs to do differently, such as higher yields and diversified production.

Research from this Barometer shows that the favoured approaches so far to raising farmer poverty are not going to bridge the income gap; higher yields do not necessarily lead to increased net income but do lead to greater risks for farmers. Without significantly higher farm gate prices, sustainability in the cocoa sector is a pipe dream.

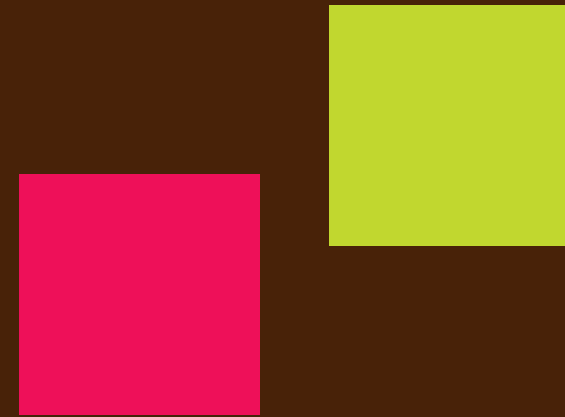
In order for cocoa to truly become sustainable – where cocoa farming households are able to earn a living income, where nature is protected and flourishing, and where all rights (including those of children, women, and other marginalised groups) are safeguarded – real change is necessary. Systemic change.

In that light, the development of supply chain legislation in cocoa consuming nations is a very positive development, although their level ambition as well as the way they will be implemented will determine whether they will have the desired outcome.

The sector change that is needed cannot just come through better farming; a key approach needs to be to look at the enabling environment of the cocoa sector. Systemic changes and improvement are necessary in governance policies and in purchasing practices. Only when these are in place is there a business case for thriving farmers.



2. Living income



Living Income

Living Income is the net annual income required for a household in a particular place to afford a decent standard of living for all members of that household. Elements of a decent standard of living include food, water, housing, education, health care, transport, clothing, and other essential needs including provision for unexpected events (Living Income Community of Practice 2020).

There are two reasons to begin this Barometer with the topic of Living Income. Firstly, Living Income is a human right in and of itself, and as such deserves a centred position in any conversations around the changes needed in the cocoa sector¹. Secondly, Living Income is also the necessary precondition for all the other challenges in the cocoa sector to be properly addressed.

Poverty as a driver

Farmer poverty is a driver of just about every problem in the cocoa sector; deforestation, child labour, and gender inequality are all made so much harder to tackle if cocoa household incomes are not raised significantly. When farmers must choose between feeding their family, and not cutting down old growth trees, it is not a choice. When they must choose between feeding their family or sending them to school, it is not a choice either. Without a living income for cocoa farmers, cocoa will never be sustainable.²

Living Income has become mainstream

The past years have seen a series of major developments on the topic of living income. The introduction of the Living Income Differential by Ghana and Côte d'Ivoire in 2019; the development of Living Income Reference Prices; Living Income Benchmarks becoming available for the major cocoa producing countries; several European Initiatives on Sustainable Cocoa (ISCOs) making Living Income a key objective; all the large cocoa and

- 1 Though living income is a human right, the sustainability legislations that have been or are being developed, such as the French Devoir de Vigilance and the EU Directive on Corporate Sustainability Due Diligence at best obliquely refer to living income. It must be unambiguously clear that living income is a key requirement for any multinational to comply to their obligations of Business and Human Rights.
- 2 However, most sustainability programmes - as well as proposed legislations - only aim to address living income in cocoa through either indirect approaches - often as a result of buying into the myths described below - or by skipping living income directly and trying to tackle issues such as child labour or deforestation without a holistic approach to solving the underlying poverty.

chocolate companies have public position statements on living income³. Living Income has become a mainstream concept in the cocoa sector.

A starting point or a finish line?

Living income is the minimum level of decency for a household, it should be the starting point, not a finish line. Still, most sustainability approaches merely see living income as an aspirational goal that will most likely not be achieved.

Farmers poverty persists

Many farmers are still not earning a living income. In fact, most are very far from earning a living income, and not even moving towards it. Though data is hard come by, the current cost of living crisis - especially coupled with rampant inflation in Ghana - is most likely only making things worse. In the meantime, most actors are largely pointing at what others need to change in their approach, rather than being willing to change themselves.⁴

Current approaches aren't working

Despite significant evidence that current approaches to raise farmer income have marginal impact at best, most cocoa and chocolate companies continue to operate business as usual.⁵ Increasingly, company representatives admit this problem, stress the necessity of a living income, and acknowledge that price is a necessary part of the equation to reach that. However, in practice, not a single large chocolate or cocoa company is paying higher prices at farm gate level. Even if there are tools available to support prices, such as the LID, purchasing departments strive to limit prices, and farmer poverty is not taken into consideration in their daily practice.

Unchanged business practices

Though most companies have made general statements in support of Living Income, there is an overall lack of concrete commitments towards

- 3 Albeit none with concrete commitments on what they are going to differently in their core business to achieve that goal.
- 4 In the words of a former senior executive at Nestlé, "it seems that these old-style sustainability interventions have been superb at guaranteeing future supplies for factories whilst keeping prices low. The unintended consequence has been the perpetuation of the main challenge that farmers face: poverty."
- 5 This is also a clear sign that companies have not adopted properly implemented human rights due diligence in their value chains. In a due diligence approach, if its current solutions are not working, a company needs to revise its chosen strategies. This process needs to be repeated until the issue is no longer a problem.

a living income. Companies, by and large, are not changing their core business practices in order to help achieve a living income. There has been very little public conversation about the industry's business model, including about how they set the prices they pay. Company purchasing practices are still largely aimed at avoiding higher prices. Simultaneously, there is a lack of transparency on the part of governments from producing origins on revenues earned from forward sales and the guaranteed producer prices paid to cocoa farmers.

No one is doing what they should be doing

Both industry and governments will need to significantly change their business as usual. Let us be very clear; not a single stakeholder group is currently doing what they should be doing to ensure farmers achieve a living income.

Bridging the Living Income Gap; data from the questionnaire

Many companies claim to want to support farmers to earn a living income. Olam, Cemoi and Mars mention concrete targets of farmers covered by a project which should lead to a living income in a specific year.

Asked about how they plan to achieve it, nearly all companies mention training in Good Agricultural Practices (GAP), income diversification, and Village Savings and Loan Association (VSLA). Others support farmers to get access to inputs and credits. Supporting agroforestry systems is also mentioned as a tool to increase farmers income.

On top of this, Cemoi and Nestlé both have measures to pay farmers more money. Cemoi claims to pay a premium for quality and sustainability of 10 to 20% of the cocoa price, and Nestlé has its Income Accelerator Programme which pays extra incentives for households that undertake specific sustainability efforts (see box).

Though a few companies indicate a "mind shift" or "new thinking" is taking place on this topic in cocoa, most companies are continuing to do the same thing they have been doing for decades: present higher productivity and diversification as the most important solution to achieve a higher income of farmer. As this chapter argues, these have only a limited impact on farmer poverty, and will only work if companies engage in Good Purchasing Practices, and governments develop and implement Good Governance Policies.

As such, the targets above must take into consideration that so far, all industry attempts to bridge the living income gap have failed significantly.

Resistance to change

Resistance to the necessary change is real. A lot of this resistance has found its way into a wide range of assumptions, simplifications, and sometimes plain wrong ideas around why living income hasn't been achieved yet. A deeper dive into these can be found in the Living Income Compendium, released by the Cocoa Barometer Consortium in September 2022, of which this chapter is a highly abridged version.

Despite farmers poverty companies are rich

There is an unspoken assumption that farmers of commodities are expected by default to be poor. While only the outlier cocoa farmers are expected to even reach the baseline of a living income, many companies are reporting record profits – despite a pandemic and a global cost-of-living crisis. Additionally, often a relatively small part of the price paid by consumers would be sufficient to increase farmer income significantly.

Good Agricultural Practices⁶

Most approaches to raise farmer income only consider a very limited set of solutions, and these are predominantly at farm level, aimed at Good Agricultural Practices. And though Good Agricultural Practices are a necessary component of a healthy cocoa sector, this has dominated the conversation for the past decade, at the expense of other necessary interventions.

Productivity per hectare: data from the questionnaire

For more than a decade, companies have been repeating over and over that farmers could double or even triple yields per hectare. Innumerable projects were set up to encourage these yield increases. Despite all these efforts, yields are nowhere near being doubled, let alone tripled. In fact, in some regions, yields are declining. There are various reasons for this, including low adoption rates, ageing trees (and possibly ageing farmers), changing

⁶ The calculations in this chapter are based on a model which is explained in further detail in the Südwind paper which can be found [here](#).

weather patterns, pests and diseases, depleted soils, and a lack of (affordable) inputs and credit.

Cocoa companies put the average yield around 521 and 534 kg per hectare for Côte d'Ivoire and Ghana respectively. These numbers are on the high side compared with other datasets. There can be several reasons for this. Most farmers inside company programmes are usually better organised than farmers who aren't in sustainability programmes, which might mean they have better access to inputs, training, and market, that makes for higher yields.

These averages are still significantly higher than the median (half of all farmers) due to outliers. It is not unreasonable to estimate that the median farmer grows 350 kilo per hectare.

Higher productivity

Recent reports show that productivity increase programmes do not have an inherent positive effect on the net income of cocoa farming households (Waarts/Kiewisch 2021, IDH 2021, Dalberg 2018).

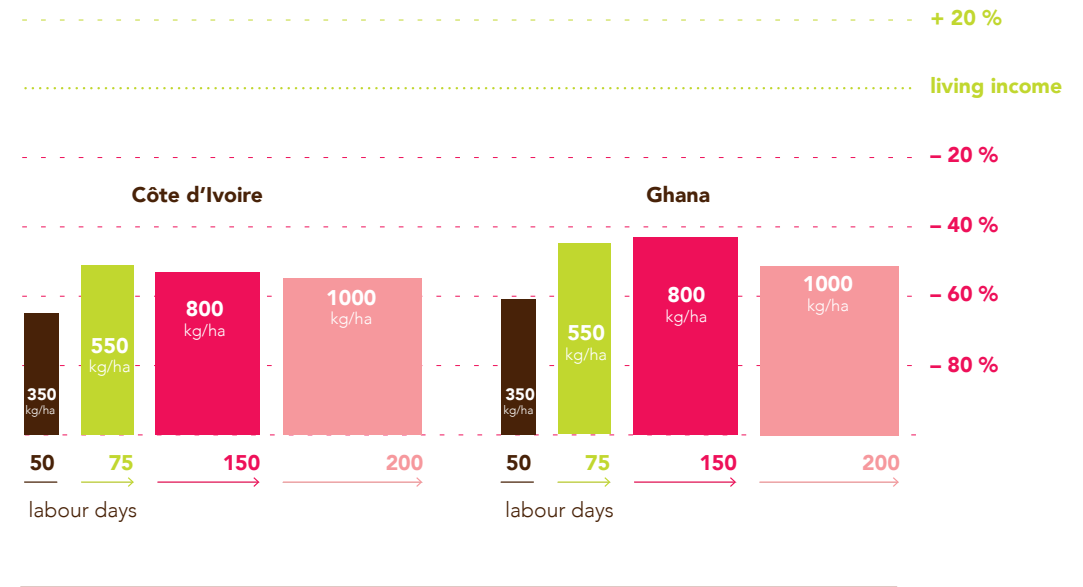
On its own, increased productivity cannot be the strategy to bridging the living income gap, for several reasons.

Firstly, it requires significant investments in inputs and labour resources, which are neither available nor affordable for most cocoa farmers. Even if they were, investing in the farm comes with significant risks, especially compared to the possible return on investment; farm gate prices could decline steeply (as they did in 2016/2017), extreme weather conditions can cause bad harvests, as can pests and diseases (such as the Cocoa Swollen Shoot Virus which is spreading in Ghana).

Secondly, increasing productivity requires an increase in labour hours. Even with current production levels, many cocoa farmers in major producing countries find it difficult to find enough labour for their farms during peak times. Every cocoa growing household has a finite amount of available labour days to spend on cocoa; a household in Ghana has 246 available labour days, in Côte d'Ivoire 272. If more labour than this is necessary, this will require hiring additional labour, if it is available in the first place. This is – not coincidentally – also one of the reasons why families revert to household members to help with the farming, increasing the risk of child labour.

Effects of higher yield on net income (based on kiloprice \$ 1,50)

farm sizes based on current GPS measurements: 3ha CIV, 2ha GHA



If only 10% of all farmers would double productivity and by this fulfil the requirements of many companies, the ensuing oversupply would cause prices to fall drastically. Any productivity increase drive must be coupled with equally strong measures to curb overproduction.

The net income effects of productivity increase

With sufficient available data, it is possible to model what would happen to the income of a household with increased yields, provided this hired labour is also paid a living wage (figure 1). Unsurprisingly, cocoa by itself does not bring a living income at present yield and price levels. But the model also shows that achieving higher yields might lead to lower net income, due to increased costs in inputs and labour. The exception here is for farms that are currently producing at the 350 kg per hectare level; getting up to around 550 kg per hectare does have benefits.⁷

⁷ This calculation of a potential increase is based on the assumption that surplus labour within the family is available to invest more time in the plantation, and that this leads to higher productivity. The situation for single women households, farms run by older farmers or sick persons might be worse, as these groups need to hire labour to achieve productivity increases.

Hired labour

The living wage in Côte d'Ivoire is US\$11 per day, and the rate is even higher for Ghana with US\$13,5.⁸ This means that 10 additional hired labour days per hectare have to lead to nearly 100 extra kilos of cocoa only to pay the additional labour bill. One could make calculations based on current wages paid to labourers, but in that case, the model would still fail to provide an adequate living income and living wage approach. The fact that most calculations don't take the labour requirements into account could be one of the reasons why the cocoa sector has such a problem with child labour, as it could be cynically seen as a supply of free/cheap labour.

Labour: data from questionnaire

Reliable data on labour input per hectare are still absent, at least publicly. Even less companies shared this data with the authors than for the 2020 Cocoa Barometer. The spread of the numbers for cocoa grown in a system with low productivity is between 25 days per hectare/per year and 85 days per hectare/per year. The figures for plantations where good agricultural practices are applied vary from 65 to 130 days. One company reported that for highly intensive cocoa production with best agricultural practices 287 days per hectare/per year need to be invested.

Tenants and sharecroppers

Many of the people working on the farms are neither hired labourers nor farm owners but are tenants in some way. Though these systems vary, few sustainability approaches so far have taken their situation into account. This includes many of the income measurements by companies. Those datasets that seem to show farmers that are reasonably well off are often of such a farm size (e.g. Habraken/Laven/Steijn 2022), that the authors of this paper believe sharecroppers/tenants might be doing some of the labour. They are, however, not taken in the income calculations, and this will be something the cocoa sector needs to look at in far more detail. Sharecroppers and tenants often do not have the same land and tree tenure rights as landowners. Though they do a lot of the farming work,

⁸ Some critics state that instead of a living wage, these calculations should be done based on current real costs of hired labour. However, that would then normalise massively underpaying wage workers. Therefore, the calculation is based on the latest scientific calculations (Anker Methodology) on living wage. the calculation uses for Ghana the figures from spring 2022. Nonetheless, the figures should be recalculated latest in spring 2023.

they therefore often don't have the right to decide how to grow their cocoa. As such, they are not able to actively invest.

This omission of sharecroppers and tenants is not just an issue when it comes to farmer income, but also has implications on their ability to protect the environment, affects the labour rights of sharecroppers and tenants, and runs the risk of policy choices being focused more on the interest of farm owners than to solving the challenges of those people doing the actual work.

Diversification

The cocoa sector's second major strategy – besides productivity increase – to increase farmers' income is a stronger diversification of farm income. Increasing income diversity is an important element of strengthening the resilience of farmer income in the case of price collapses, crop diseases and adverse weather. However, diversification is insufficient as a solution to actually increase income, for a variety of reasons.

Cocoa producers in both Côte d'Ivoire and Ghana already have a strongly diversified income structure (Bymolt/Laven/Tyszler 2018). Just as with the strategy to increase productivity per hectare, diversification requires investments and labour. The same constraints and risks are applicable. Furthermore, cocoa and chocolate companies should not outsource the problem of non-remunerative cocoa to other sectors; cocoa should be a remunerative crop in and of itself.

It is unclear whether there is a sufficient market for diversified products, especially at the scale needed to provide for all cocoa farmers in the major cocoa producing nations. Other sectors with poor farmers in the value chain also promote diversification, and some of these crops grow in the same regions as cocoa. The fact that these farmers are also poor signifies a feedback loop of poverty, with many different sectors not able to provide a living income, all looking to other crops to solve their problem. This vicious circle needs to be broken, and it can only be done through increasing farmer income.

To achieve diversified production, farmers need to invest in their farm, and carry all the risk, while companies hope that income from other sources brings farmer in a position to sell cocoa as cheap as they are doing now.

Farm size

Some farms, the argument goes, are too small to be economically viable. However, it is highly likely that most larger farmers that currently seem

to be earning a living income - in the limited datasets that are publicly available - are helped by sharecroppers or tenants whose needs are not factored into the calculations. The moment a single household cannot cover all the work it would have to hire labour, which is as limiting a physical factor as is farm size. It might even be that instead of a minimum viable farm size, it is more realistic to speak about a maximum viable farm size per household.

If one were to accept the argument that some farms are too small to be viable and would somehow be able to increase the average farm size, the effect of higher yields become negative for most farms as larger farms require more labour. Lower productivity not only comes with much less risk for farmers, increasing productivity on large farms might even have a negative impact on net income, as more land requires more labour.

Furthermore, increasing farm size is easier said than done. It requires significant reforms in land and tree tenure, as well as a committed rural development strategy at governmental level. Bigger farms, at least at the short to medium term, does not seem to be a very viable strategy for the majority of cocoa farming households.

Farm size: data from the questionnaire

Most figures on average farm size in older studies might be wrong, as they relied on self-reported figures collected from farmers who often overestimate their farm size. Using GPS polygon mapping, hundreds of thousands of farms have been mapped in the past years. Most companies shared (some of) the outcomes of this mapping for the questionnaire.

Farm sizes are a lot smaller than previously estimated, but there is a significant discrepancy in data between traders/grinders and chocolate brands⁹. In Côte d'Ivoire, according to data from eight traders/grinders, average size is 3 hectares. According to three chocolate producers, it is 3.7. The discrepancies are bigger for Ghana, where the farm size is 2 ha (according to eight traders/grinders) and 3.1 (according to three chocolate companies). The average figures for other major cocoa producing countries are Nigeria 2.3 ha, Cameroon 3.3 ha, Indonesia 1.5 ha and Ecuador 5.8 ha. But this is based only on 2-3 companies per country.

⁹ Probably because of the selection bias of chocolate companies, who tend to work more with established and organised farmers with larger farms.

Averages hide a lot of nuances, however, as there is a significant spread in the data on the farm sizes. A better metric often is to look at the median, but only four datapoints were available, two for Ghana, two for Côte d'Ivoire. These were all roughly 0.75 ha lower than the data for average farm size.

Pensions

Many cocoa farmers are ageing, but old age does not exempt farmers from having to do the backbreaking labour. A possible solution could be to introduce national pension schemes¹⁰ in West Africa, much like was done in land-redistribution policies in Western Europe in the 1960's and 1970's.

Elderly farmers would be able to receive a lifetime pension, in return for giving up their farming land to the government. The government could then use this land to instil tenure reforms, making new farms available to a younger generation, many of whom could be offered these farms in lieu of their vacating the cocoa farms in currently classified forests. An extra requirement could be that the new farmer commits to an agroforestry approach, combined with a set of technological improvements and extension services to make the new farm more professional.

Such a solution could be a win-win situation for all parties involved; elderly farmers can have an opportunity to stop labouring, younger farmers can become modern and professional cocoa farmers, protected areas are made available for reforestation, yields can go up, and governments have a means to enable national agricultural policies to reduce overproduction.

Common approach to collecting data

The Cocoa Barometer has been repeating the same message for over a decade now: sustainability data needs to be made public, and it needs to be done in a standardised way that allows for proper comparison and evaluation.

A common approach to collecting farm data does not exist yet, but should include polygon mapped farms, including all cocoa plots of the household

- data should differentiate between productive cocoa plots, and non-

¹⁰ Though Ghana recently introduced a pension scheme for cocoa farmers, this does not seem to be coupled with any broader rural or agricultural development policies.

productive plots, such as diseased or freshly planted areas

- *data should be made available not just on averages, but also on means*
 - *the database should allow to identify regional differences*
 - *yield measurements should be more accurate*
 - *field tests should identify the workload for different agricultural practices*
-

20

Gender and income

Gender inequality remains the rule rather than the exception in many cocoa growing regions. This is deeply problematic, both because gender equality is a rights issue of itself, but also because women are change agents in and of themselves. Creating gender equality is one of the smartest and most effective ways to tackle a wide range of problems, from deforestation through child labour to raising household income.

Female headed households

Many of the households that have been identified as 'high risk' for poverty are headed by females. The solution for these households is not to transition them out of cocoa, but to ensure that women's rights are respected and structural barriers they face are eliminated.

VSLAs

The way most programmes so far have approached gender and income is primarily through Village Savings and Loans Associations (VSLAs) and/or alternative income generating activities focused on women. Very little is done to strengthen the position of women as landowners and cocoa farmers themselves.

Position of women in male headed households

A key challenge is to strengthen the position of women in male headed households. The work that women undertake on farms, as well as in household care, is often invisible and unpaid. Women shouldn't be looked at as merely wives of cocoa farmers or 'helpers' or 'supporters' of their husbands, doing 'light tasks' on their husbands' farm; they are very much essential to cocoa farms.¹¹ Despite this contribution they can have little to no say on how household income is spent.

11 Their work often includes planting, weeding, harvesting, and fermenting cocoa beans, collecting water and wood for fuel, carrying the plucked/fermented cocoa beans through a long-distance for drying at homes before they are further sent for weighing at sheds, caring for children and elders, washing the clothes - particularly gear of those working on farm. As well as cooking and taking the food to the male farmers in the cocoa groves, etc.

Land tenure

The absence of legal access to land or land title registration effectively blocks women from key opportunities such as achieving financial access or admission into cooperatives, as farm ownership is often a major requirement for joining a cooperative.

21

Customary land rights in Côte d'Ivoire

In Côte d'Ivoire, the exploitation of rural land is governed by Law No. 98-750, which recognizes the customary rights of communities over their land. The law requires the conversion of these customary rights into legal rights through the obtaining of the land certificate and then the land title. Since 1998, the deadline for converting customary rights into modern rights has been extended several times. The last deadline expires in 2023, however, so far only 4 to 5% of rural land has a land certificate.

In a context of land pressure, this atmosphere of insecurity of producers on their land deserves special attention, both regarding customary rights of communities on their land, as well as regarding the preservation of family farming.

Recipients of payments

Women are often not the recipient of the payments; usually, the male household members sell the cocoa while women work on the farm. This means that the money may not directly get to the woman farmer, nor may she have a say in deciding how that money is spent. Women have much higher rates of illiteracy and innumeracy, and also have a reduced access to markets. They do not have the same access to credit and inputs needed to professionalise.

Representation

Women often lack representation in community governance, especially in leadership. Even when women are the direct recipient of interventions, prevailing social norms can contribute to a lack of socio-economic visibility, agency, and power.

Gender specific approaches necessary

The design of interventions, policy, and trainings do not always account or accommodate for the barriers that women farmers such as time poverty and disproportionate care work. Women do not automatically benefit from higher incomes. Therefore, every single programme and intervention must have a gender-specific approach, informed and validated by women

farmers, ensuring rewards are distributed equally, and risks are shared justly.

Higher prices

An often-heard statement in conversations is that we shouldn't only talk about price as the driver to living income. This, however, is a false statement: there are no approaches that only look at price to solve the income gap. It is a useful way to deflecting away the key point, which is that higher prices must be part of the solution. While raising prices might not help the struggling farmers to completely reach a living income, it will nonetheless help them increase income, sometimes by significant percentages.

Though antitrust law provides barriers to discussing higher farm gate prices, ways can be found to have conversations about higher farm gate prices, both collectively and individually. In fact, there are some first steps being taken to test significantly higher prices as part of living income strategies.

Living Income Reference Prices

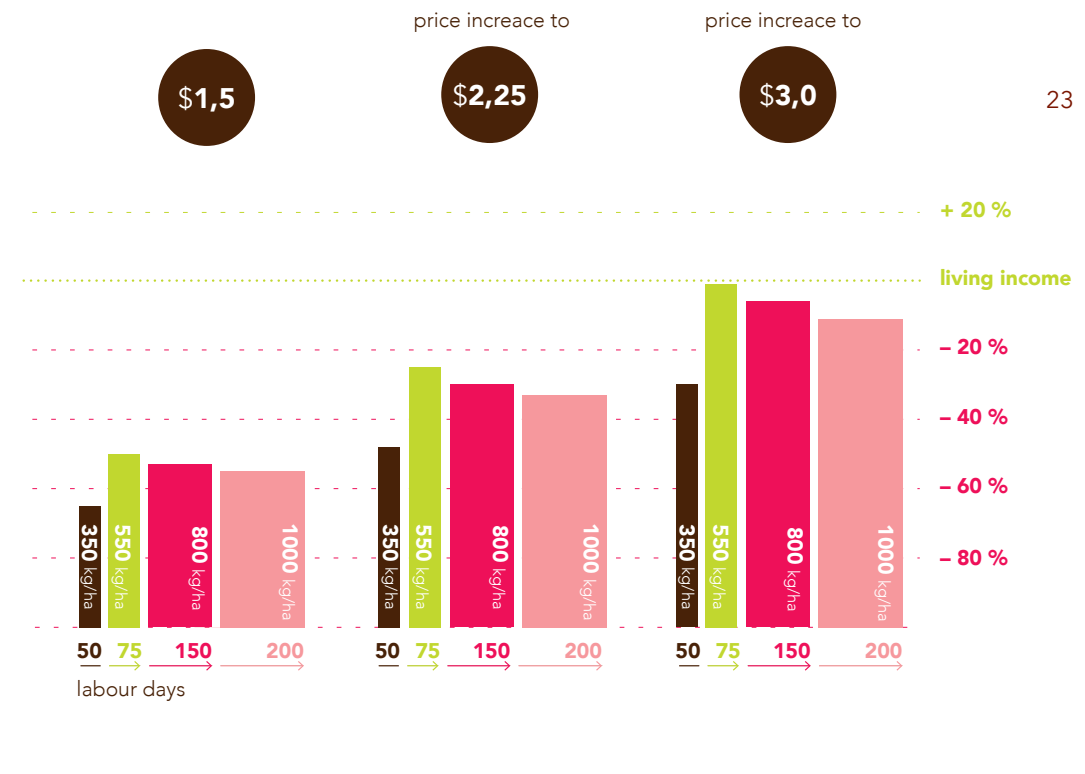
One way to ensure farmers receive higher farm gate prices is by implementing Living Income Reference Prices (LIRP). The principle of a LIRP is that the farm gate price determined by the market is supplemented by additional payments direct to farmer to allow the household to earn a living income. Developed simultaneously by Fairtrade¹² and Tony's Chocolonely, these systems are by now being adopted by a variety of actors, such as Ben & Jerry's, Ahold, Lidl Belgium, Aldi, Rewe and Colruyt.

Though there are some caveats to be placed at this system - especially around their requirement for farmers to grow 800kg per hectare - it is at the moment one of the only systems in place that is paying cocoa households significantly more for their cocoa, in an attempt to bridge the living income gap.

12 In addition to the Living Income Reference Price - which is voluntary in the Fairtrade system - Fairtrade has a mandatory minimum price, which guarantees that prices can never go below a certain level. At the time of writing, this means that Fairtrade is paying \$311.41 per tonne extra for Côte d'Ivoire, where 70% of their sales are from.

Effects of higher yield on net income Côte d'Ivoire (increasing kiloprice)

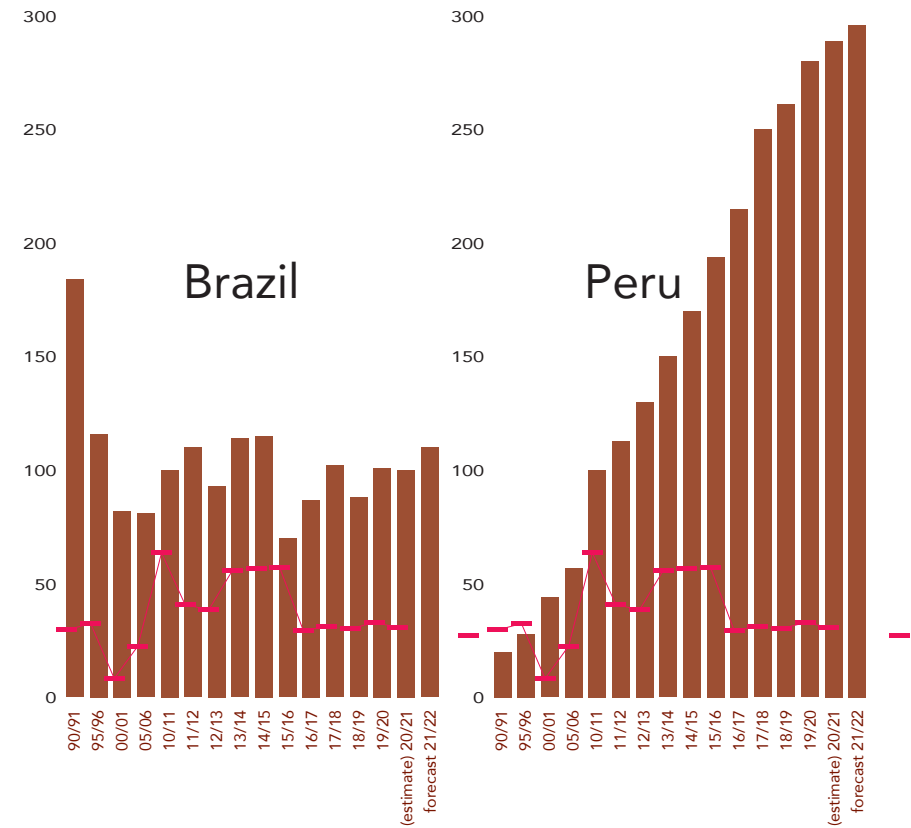
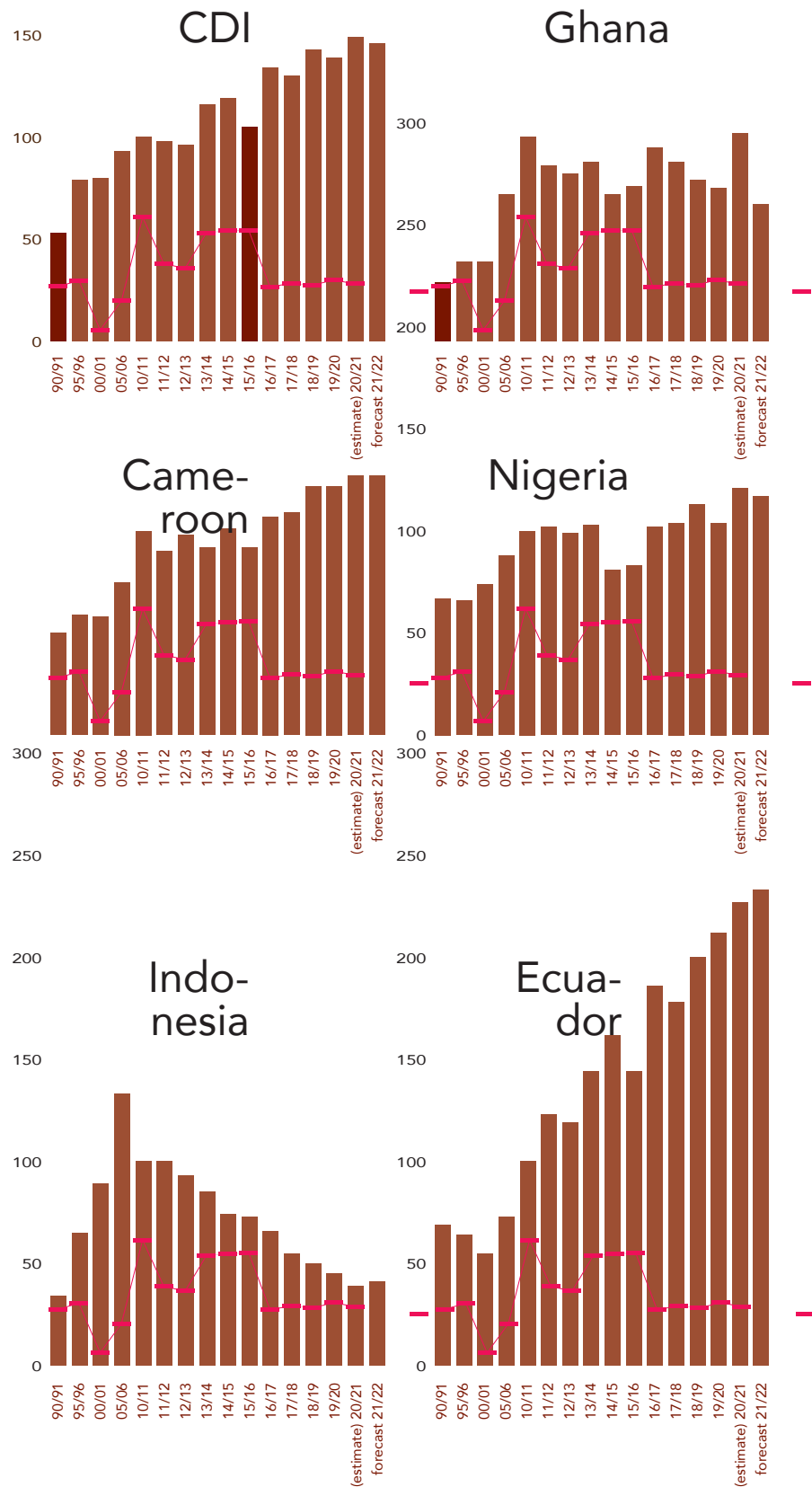
farm sizes based on current GPS measurements: 3ha CIV, 2ha GHA



The effects of higher prices on net income

When using the same parameters as used earlier on higher yields, price increases make a clear difference. At a farm gate price of US\$3 per kilo, average¹³ farm households could either earn a living income or come significantly closer to benchmarks, even in current production structures. The only way to bridge the income gap is by paying higher prices. This does not mean that this is the only intervention needed - as argued elsewhere, there is a real role to play for Good Agricultural Practices, especially to get the farmers from the current mean to the current median, as well as diversification through agroforestry, land and tree tenure security is needed, access to education and healthcare, improving the infrastructure to reduce transport costs, gender equality, and other enabling situations.

13 Once again, it is important to note that this is the average farmer.



Due Diligence

The data is clear; without also ensuring higher farm gate prices, the living income gap cannot be bridged. This raises serious questions about the strategy of many projects to improve productivity or call for larger farm sizes. A due diligence approach requires companies to adapt strategies if they are proven not to work. It is obvious that the cocoa sector has to talk about farm gate pricing, in order to bridge the living income gap.

Yield increases and overproduction

One argument often used against raising prices is that it leads to overproduction and deforestation. And though this is a possibility - higher prices can create an incentive for farmers to produce more - the volumes of cocoa produced in different countries show that cocoa price and increased production do not always go hand in hand.

Cocoa prices were significantly higher during the period 2009/10-2011/12 and again 2013/14- 2015/16 than in recent years. In these years and the following seasons, cocoa production in Côte d'Ivoire rose significantly,

while it stagnated in Ghana, significantly decreased in Indonesia, and grew only slightly in Cameroon and Nigeria. In Peru and Ecuador, government programs stipulated rising cocoa production. Though price can have an effect on the amount of cocoa produced in a country, the political and economic situation in the country also play a key role and can therefore also be put in motion to curb overproduction.

Furthermore, as it takes up to 5 years from planting a cocoa tree to the first good harvest, price fluctuations do not immediately translate to production levels. Most farmers know from their own experience that prices fluctuate strongly, and they do not trust short phases of higher prices, as they know that this could be very different when their crop is finally ready to be harvested.

As the industry never tires to emphasise: the matter is complex, and price is not the only driver in managing supply levels

Supply and demand

World market prices determine farm gate prices in all cocoa producing countries. In Côte d'Ivoire and Ghana, this process is slightly more indirect, as state run marketing boards CCC and COCOBOD set a price for a season. However, as this price is set based on the forward sales that the marketing boards can make, it is still completely a function of how the terminal markets work. Though markets can work well to set proper price levels when all actors have countervailing power, it does not work for cocoa farmers. One of the key determinants for a farmer's income is therefore imposed on them.

Hedging

All medium and big companies downstream in the cocoa and chocolate supply chain use price hedging instruments extensively, to ensure they have a stable supply of cocoa in the future, which they need to make their chocolate. In contrast, except for the forward sales done by COCOBOD and CCC, there are no measures in place to protect farmers against price fluctuations.

Options and futures

Futures are binding contracts. **Options** leave the option(s) open to implement the option to buy or sell an asset or not to do so. An option is more flexible in terms of time than a future because it is not tied to the five annual settlement dates of the cocoa future trading system. (...) Futures can be purchasing or sales contracts. A purchase contract obliges the buyer to purchase a fixed quantity of a commodity at a

certain price at a certain point in time (stock exchange language: long). A sales contract obliges to sell a certain quantity at a certain time at a certain price (stock exchange language: short). The stock exchange issues a corresponding sales contract for each purchase contract. Towards the end of the term, both are usually closed off, i.e. there is no physical delivery, but only the price difference between the contracts is cleared" (Hütz-Adams/Schneeweiss 2018).

Financial speculation influences price

In theory, future prices follow the physical market, based on forecasts of supply and demand. However, the futures market influences price setting as well. As opposed to the chocolate and cocoa companies that need to the cocoa for their final product, many investors and hedge funds see cocoa trading exclusively as a way of profiting from price fluctuations. They may, under certain circumstances, even significantly amplify these fluctuations to increase profits. Moreover, because hedge funds often have cocoa mixed in commodity investments, events that are completely unrelated to cocoa can also have significant - if temporary - effects on cocoa prices. For example, at the beginning of 2022, news about an increasing number of Covid-19 cases in China led hedge funds to sell investments in commodities, including cocoa.¹⁴ This led to a price drop for cocoa. Although prices recovered within two or three weeks, the world market price was at a level not based on physically available cocoa, but on decisions of investment funds. This is problematic for Côte d'Ivoire and Ghana, who presell most of their harvest in the first months of a year, long before the harvesting season starts in October. A short dip in prices based purely on speculation might cost them a lot of money.

Chocolate companies not dependent on cocoa price

Chocolate companies, unlike farmers, can react quickly to price increases, for example by stimulating the consumption of products with less cocoa content. It is striking that between 2012/13 and 2015/16 the grinding figures on the global cocoa market remained nearly stable at roughly 4.1 million tonnes but increased immediately after prices collapsed in the harvesting season 2016/17. After prices collapsed by more than 30% grinding quickly rose by almost 25% to 5.1 million tonnes in 2021/22 (forecast) (ICCO 2022). In all these years, the turnover of the chocolate industry rose steadily. In order to be profitable, the chocolate industry doesn't seem to be very dependent on its most important ingredient.

¹⁴ Source: explanation of a sudden price decrease by a trader in a workshop in spring 2022 under Chatham House rules.

Supply and demand don't work for farmers

In response to the 2015 Cocoa Barometer, the Dutch government commissioned a study (SEO 2017) on the role of market concentration and price formation in the global cocoa sector. One of the key outcomes of this report was that supply and demand don't work for cocoa farmers.¹⁵ Already in 1991, a former president of the European Commission argued (Mansholt 1991) that in agriculture, "the price mechanism does not correspond very well to the ideal-typical neoclassical market concept." This is even more the case for tree crops than in annual crops, as farmers are even more tied to their production.

In that context, additionally, it is devastating for cocoa farming communities that in the global increase of cost of living that is spreading as this paper was written, all the costs of living and of producing cocoa are going up, but the price they receive for their cocoa at the stock exchange is staying the same.

Decommodifying cocoa

It can no longer be enough to hide behind the argument that "this is how the market works". New systems need to be found, despite the market. One such system could be that producer governments completely decouple the cocoa price from the commodity exchange market, and fully set it themselves as a function of the costs of production, including what is required to provide a living income. This would of course require collaboration within all producer countries.

Living Income Differential

In 2019, CCC and COCOBOD - the cocoa marketing boards of Côte d'Ivoire and Ghana - decided to collaborate to raise the price for cocoa at the world market. They first announced a price floor of \$2,600 per tonne, but after negotiations with the cocoa and chocolate industry decided to introduce a Living Income Differential (LID) of \$400 per ton. Many companies welcomed the decision publicly, albeit with caveats about how it would be executed. However, the LID has become a topic of intense debate, with the Ivorian and Ghanaian Cocoa Initiative (CIGHCI) - tasked with making the LID reforms work - become increasingly combative

15 "The supply of cocoa is inelastic in the short run and [...] cocoa is produced by millions of small farmers. As a result, individual farmers are price takers with little or no bargaining power vis-à-vis local cocoa buyers. In addition, most cocoa farmers have very few options for alternative income generating activities. As a result, they will likely continue to produce cocoa at very low prices."

towards industry, and companies actively avoiding paying the differential in a variety of ways.

Purchasing and sustainability disconnected

One way the LID is being undermined is when companies buy significant amounts of cocoa from other origins. Though this is legal, it undermines the effectiveness of the LID. For this to be tackled, a combination of supply management at producing government level and changed purchasing practices at company level is going to be necessary. The LID is a perfect example of the disconnect between sustainability and procurement practices.

Quality differential

Market power - as well as the availability of stockpiled cocoa - is also used to avoid the differential completely. Sales of Ivorian and Ghanaian cocoa were very low at the beginning of 2021, and again in 2022. However, as CCC and COCOBOD need to forward sell their cocoa to fix a minimum price at the beginning of the season¹⁶. Some companies waited until CCC and COCOBOD were desperate, stepping in very late and offering to buy large volumes of cocoa with the condition of a significant discount on the country differential, which is another premium usually added to the stock market price. When the LID was introduced, this country differential turned negative. Income from cocoa was therefore not increased by US\$ 400 per tonne but by much less - if at all.

Lower minimum prices

Based on the introduction of the LID, farm gate prices went up for a season. However, as a result of the above dynamics, Côte d'Ivoire had to lower its minimum price mid-season after introducing the LID. In Ghana, inflation combined with the depreciation of the national currency reduced the government's necessity to lower the price, although the Cocobod claims it did subsidise minimum prices.

Economic pact and boycott

In June 2022, the CIGHCI and the cocoa industry agreed on a joint Economic Pact, where industry committed to paying the LID and to positive quality differentials. In the summer of 2022, the CCC and

16 Ghana additionally uses the presales as security for a very large loan arrangement and foreign exchange from international banks, which comes with very low interest rates due to the fact that presales of cocoa serve as a security against a default of the bond.

COCOBOD started publishing the paid quality differentials¹⁷, in the hope that this would bring the quality differentials, so that the LID can increase the farm gate prices. However, the Ivorian and Ghanaian governments claimed that progress was not made, and as a result they boycotted the World Cocoa Foundation's Partnership Meetings in October of 2022.

Transparency needed

What happens on the world market is one thing, how that affects farm gate prices is another. One of the missing elements is the fact that there is little transparency about the money involved; there is a large difference between the \$400 surcharge and the additional price the farmer receives, especially given the current exchange rates. Much more transparency from the producing governments is needed, and farmers and civil society should be involved in setting the minimum prices.

Summary

Despite significant evidence that current approaches to raise farmer income have marginal impact at best, most cocoa and chocolate companies continue to operate business as usual. Most sustainability approaches see living income as an aspirational goal that will most likely not be achieved. There is an unspoken assumption that farmers of commodities are expected by default to be poor, although many companies report record profits.

Gender

Many of the households that have been identified as 'high risk' for poverty are headed by females. To tackle this, women need have the same rights and opportunities as their male counterparts. Women do not automatically benefit from higher incomes. Therefore, every single programme and intervention must have a gender-specific approach, ensuring rewards are distributed equally, and risks are shared justly.

Productivity, labour, farm size

Increasing productivity is necessary but insufficient to achieve a living income. Often the resources to invest in higher productivity are not available or affordable. The labour needed to increase productivity is also not available, and if it were this labour would not be affordable, given that wage workers have to be paid a living wage. The added

costs of hired labour and inputs make it very hard to reach a higher net income simply by growing more cocoa. The argument that farms might be too small is also very hard to maintain when data is analysed; the larger the farm, the more labour is necessary, while cocoa households have a finite amount of labour available. Increasing productivity does raise the risk for farmers, as investments are done up front. Issues of costs, availability of labour, and risk are also reasons why diversification into other commodities does not prove a sufficient solution, although it is an important strategy for resilience.

Price

Whereas raising productivity or increasing farm size both do not guarantee an increase in cocoa farmers' net income, there is a lever that does raise income quite quickly; paying a higher farm gate price is inevitable if the living income gap is to be breached. Supply and demand do not seem to work properly to remunerate farmers. Interventions such as the Ivorian-Ghanaian Living Income Differential are necessary first steps to ensure the farm gate price goes up.

¹⁷ The impact of this will not be seen for a while, as CCC/Cocobod have already forward sold the cocoa for this season.

3. Environmental Protection



Environmental Protection

The environmental concerns in cocoa production are truly global in scope, ranging from Latin America, through Southeast Asia to West Africa. Surprisingly, environmental concerns are relatively recent additions to the global sustainability discourse in cocoa, although issues such as changing weather patterns, deforestation and the loss of natural ecosystems have been felt and challenged by communities in the Global South for many years. Many of these issues are either rooted in, or exacerbated by, the poverty of cocoa farming households.

Deforestation

Cocoa production is a driver of deforestation in all cocoa growing regions of the world, but especially in West Africa. Ghana and Côte d'Ivoire have particularly alarming rates of deforestation. Over the past 30 years, Ghana is estimated to have lost 65% of its forest cover, while Côte d'Ivoire has lost around 90% of its forests. The majority of this dramatic tree cover loss has been within cocoa-growing regions of both countries. The last remaining national forests are under pressure, or already damaged, with cocoa as a key driver of this destruction.

Deforestation is ongoing in Côte d'Ivoire and Ghana

Though the rate of deforestation in Côte d'Ivoire and Ghana slowed down briefly in the late 2010s, it has been on the rise again over the past few years. Research published by Mighty Earth in February 2022 (Mighty Earth 2022) revealed that since January 2019, cocoa-growing regions of Côte d'Ivoire and Ghana had lost nearly 60,000 hectares of tropical forest; an area equivalent to the size of the city of Madrid. Recent data from the Ivory Coast shows that 2.4 million hectares of forest – an area almost the size of Rwanda and more than half of the size of the Netherlands – was replaced by cocoa plantations between 2000 and 2019 (Renier et al, 2022).

Furthermore, rainforests in Indonesia, the Amazon Basin, and the Congo Basin are all under pressure from encroaching cocoa farms.

Impacts of deforestation

Deforestation has a range of negative impacts. The most obvious of these is the loss of biodiversity and habitat, with extinction of many forms of flora and fauna as a direct result. The loss of forests also means a loss of livelihoods for people who depend on forest resources for their food, fuel, medicine and building materials. Through widespread deforestation, humanity is also more exposed to potentially lethal pathogens. The threat of such zoonoses has become significantly more urgent in the public perception in the past years.

Forests have a tremendous climatological contribution; acting as massive carbon absorption and storage systems, forests play a key role in mitigating climate change. Forests contribute to soil and water quality and flood prevention. Deforestation disturbs local, regional, and global water cycles, and this can result in less clouds, lower humidity, and modified patterns of rainfall.

Voluntary initiatives

After significant public pressure from campaigning NGOs, including civil society organisations in producer countries, several voluntary initiatives were set up to tackle deforestation in the cocoa sector.

Notable amongst these has been the Cocoa and Forests Initiative (CFI), which brought together multinational cocoa and chocolate companies and the governments of Ghana and Côte d'Ivoire to end cocoa-driven deforestation. However, over five years since its launch, CFI has yet to achieve this objective, or even come close.

In Europe, several national cocoa platforms – ISCOs, or Initiatives on Sustainable Cocoa – were set up, all with major commitments to halt deforestation. However, these voluntary initiatives have all led to very little progress on the ground in terms of slowing cocoa-driven deforestation.

Traceability and transparency

Fighting deforestation effectively in supply chains is impossible without traceability and transparency. Traceability is needed for companies to understand where their cocoa is coming from, and whether these points of origin are within (or in close proximity to) areas of recent deforestation. Transparency is key, because it allows actors to work together to mitigate the risk of deforestation in certain areas, as well as providing an accountability mechanism by enabling civil society and other actors to engage with private and public sector actors that are failing to address deforestation in cocoa supply chains.

The upcoming European Commission's "Deforestation Regulation" will require traceability of commodities entering EU markets back to field plot level. This regulatory development should create the necessary pressure for companies and producing governments to make progress after many years of promises. National monitoring and traceability systems are almost ready to be launched in both Ghana and Côte d'Ivoire, and cocoa and chocolate companies have recently announced plans to collaborate and share data into these systems. Despite all these good intentions, more than half of the world's cocoa is still not traceable at all, and most cocoa

that is traceable is only traceable to the cooperative level, not to farms or plots.

Traceability should not be confined to just the farms but should include mapping of remaining forests outside of existing farms. This is necessary to be able to monitor and report on deforestation-free cocoa, as well as providing the necessary data to be able to remunerate farmers for environmental services provided keeping forests or restoring degraded forests through agroforestry.

Along with traceability, there is an urgent need for much greater cocoa supply chain data transparency. At the October 2022 World Cocoa Foundation Partnership meetings, the CFI announced it was undertaking a major cocoa traceability initiative with 18 large cocoa and chocolate companies, along with the World Resources Institute, to gather geolocation data on hundreds of thousands of cocoa farms in the companies' West African supply chains. But as yet, there is no hint that this data will be made publicly available. Ongoing reluctance by both industry and government actors to make this kind of data publicly available stifles potential efforts at multistakeholder actions that could target deforestation hotspots, and ultimately slows progress in combatting the wider problem.

Legal vs. illegal deforestation

In many origin countries, a differentiation is made between legal and illegal deforestation. However, there is little point in emphasising illegal deforestation in cocoa in Ghana and Côte d'Ivoire; most parks and protected areas have already been destroyed in whole or in large part. The key is to stop all deforestation for cocoa (and other products) everywhere, legal or illegal, and to regreen all cocoa wherever it is, moving away from monoculture toward diverse agroforestry.

Reforestation and restoration

Putting an end to deforestation is not enough; so much old-growth forest has already been lost, it is essential for parts of the deforested areas to be restored in their environmental functions and for rainforests to regenerate over time. In those parts that will continue to be used as (cocoa) farmland, diverse agroforestry systems should become the norm.

Smallholders

In the context of zero-deforestation and traceability, the interests of farmers need to be considered when designing these traceability systems. Smallholders need to be supported to comply with deforestation measures, and they should be compensated for any costs incurred. This

could be done by companies offering premiums for cocoa grown through agroforestry and other sustainable production systems that keep forest landscapes intact, or even for restoring degraded woodlands. All cocoa farmers will need to earn a living income in order to alleviate pressure on forests from cocoa production.

Forest protection and human rights

Forest protection must be done in a way that upholds and respects human rights, and it is necessary to involve farming households in protection and restoration efforts in their area. Where this is not possible, farming households should be helped to find alternative sustainable livelihoods. What should be avoided are violent evictions of farmers, as has been witnessed several times in the past years. Communities that are currently in protected areas must be relocated by providing realistic alternatives, and existing cocoa farmers must be allowed to earn a decent livelihood from their farms without feeling the need to expand into protected forested lands to earn more income. Reciprocally, protected areas are a necessary tool to conserve endangered biodiversity, and should be accepted and respected by communities.

Landscapes and cross-commodity

It is important to note that stopping deforestation requires actions at many more levels than just at the cocoa farm. Landscape approaches are necessary, bringing in all relevant actors in the communities. These landscape approaches (usually named forest & landscape restoration) are not much used in cocoa landscape, although there is a great potential for their use. Such approaches should not be limited to cocoa but should cover the various land-uses in the landscape and address the needs of multiple groups, rather than being set-up in line with the zero-deforestation commitments of the international cocoa sector.

Agroforestry¹⁸

Cocoa agroforestry systems can bring a wide range of ecological benefits, such as biodiversity conservation of flora and fauna, carbon sequestration, preserving and strengthening soil moisture and fertility, contributing to pest control, and microclimatic control such as stimulating rainfall.

Agroforestry can also be part of the solution for some of the socioeconomic challenges. Yields can be just as high in high biodiversity

¹⁸ A deeper dive on agroforestry can be found in the [2020 Cocoa Barometer. Consultation Paper on Agroforestry](#), released in June 2020.

agroforestry systems as in full-sun production (Clough et al. 2011), and there are indications that cocoa agroforestry systems can have similar or even better economic performance compared to conventional, full sun systems (Jezeer et al. 2017). Cocoa agroforestry systems can and should provide additional income opportunities to farmers, and to serve as incentive for farmers to invest and maintain agroforestry systems in cocoa producing origins.

Best practices in agroforestry cocoa and in cocoa productivity enhancement can be combined to ensure that agroforestry does not need to be paired with increased use of agrochemicals. Programmes adopting the paradigm of “sustainable intensification” or “climate smart agriculture” need clear insights into the trade-offs between agrochemical use and agroforestry systems. Furthermore, cocoa varieties should be favoured that thrive under diversified shade conditions, and that do not need high levels of external inputs such as fertilizers and pesticides.

Agroforestry; data from the questionnaire

Though most companies claim to be active on this topic, comparing activity on agroforestry is proving troublesome. Most have included agroforestry in farmer training manuals. Many distribute tree seedlings of different varieties to farming communities. Some claim to buy a lot of cocoa from agroforestry systems. However, there is no common definition of agroforestry. As such, the data provided by companies remains largely unusable in making comparisons.

Zero-deforestation is not the same as cocoa agroforestry

There is no direct relationship between promotion of agroforestry and halting deforestation. Agroforestry cannot replace natural forest. However, agroforestry cocoa can play a (minor) part in compensation and restoration measures for previous historic deforestation. In this sense, it is important for companies in the cocoa industry, who have benefitted from past deforestation in their supply chains. Agroforestry is also important for major cocoa producing countries, as they urgently need to re-green their nations, some of which are on a collision course to desertification because of tree cover loss. For such countries, rolling out agroforestry wherever possible can help anchor rainfall and restore some tree cover.

Agroforestry should not replace forest areas

Despite good intentions, low shade standards (as exist in the current voluntary sustainability standards) encourage and enable degradation

of existing, more complex agroforestry systems to stimulate productivity. Agroforestry should not replace forest areas, nor can simplified agroforestry be a substitute for more diverse agroforestry systems. Instead, agroforestry systems should be used to strengthen resilience of cocoa production regions and to restore degraded land. All monoculture cocoa should be replaced over time with agroforestry cocoa, with progressively more diverse agroforestry systems put in place.

Low impact of current efforts

A large gap separates the current reality of agroforestry in the cocoa sector from its potential. Alignment on an adequate definition is missing, causing almost every company to be using a different definition¹⁹. Where there is alignment, this is often at a lowest common denominator level. Furthermore, there is a lack of enforcement at all levels (within CFI, in certification labels, in government agroforestry and deforestation standards). Most efforts also remain uncoordinated, with little synergy between companies and the landscapes they operate, resulting in minimal landscape transformation and agroforestry improvements. Crucially, agroforestry programmes are often presented as “oven ready” packages for farmers to take or leave, rather than designing “farmer-centric” approaches that involve farmers in the basic design of these programmes from the outset.

Low tree survival

The impact of agroforestry reforestation campaigns for existing cocoa plots is unfortunately minimal. In Côte d’Ivoire, despite a great number of tree distribution campaigns, distributed tree survival was less than 2% (Sanial 2019). Even when trees do survive distribution, most young tree seedlings are cut down during weeding, due to a lack of training on agroforestry practices provided to the person who is doing the actual work at farm level, such as sharecroppers (Uribe-Leitz/Ruf 2019). This clearly shows the need for intensive training, education, and collaborative work with cocoa farmers and farm workers to ensure success in any transition away from monoculture towards agroforestry.

Low adoption rates

Adoption of agroforestry by farmers currently in cocoa monoculture systems is minimal, for several reasons. Costs and benefits of agroforestry

¹⁹ Because of this confusion of definitions, the European ISCOs have attempted to assign definitions to different categories of agroforestry. This makes it clear that there are considerable differences in terms of quality. The aim should be that members of the ISCOs source cocoa from at least category 4 in their supply chains. The definitions can be found [here](#).

are often unclear to farmers, and many farmers have been led to believe that full-sun monoculture is the way to go. Few farmers can afford the initial investments to transition to agroforestry. Land and tree tenure insecurity provide additional barriers. When agroforestry programmes are not rolled out taking gender into account, adoption rates by women farmers will also be low. Finally, when farmers have access to new cocoa planting material, these are often varieties that have been adapted to full sun conditions, and therefore are not very suitable to agroforestry.

Climate Change

Changing weather patterns due to climate change are a daily reality in many cocoa producing regions. Its impact can differ wildly depending on locality; unpredictable weather patterns and extreme weather events including extended droughts or severely increased rainfall have a direct impact on the overall health of the trees, disease incidence, and the ability to set flowers and produce fruit. We are in the middle of a climate crisis.

Areas become unsuitable for cocoa production

Large parts of the West African growing regions will gradually become unsuitable for growing today's cocoa varieties by 2050 if no adaptation measures are taken (Schroth et al. 2016). The Americas are also already affected by climate change, making some regions less suitable for cocoa production – but also making other areas that were previously unsuitable for cocoa production much more interesting for this crop. Weather phenomena such as La Niña and El Niño²⁰ lead to droughts and/or short-term heavy rainfall, depending on their characteristics and course. Though La Niña and El Niño are naturally occurring phenomena, and are not man made, they are becoming more frequent and also more severe (de Sousa et al. 2019).

There is a particular irony in the fact that deforestation caused by cocoa will over time contribute to an environment that means cocoa can no longer be grown in the exact areas that were deforested for the crop in the first place.

20 El Niño and La Niña are naturally occurring weather events of warmer (El Niño) and colder periods (La Niña) around the Pacific Ocean that affect global temperatures and rainfall patterns, and as such have effect on cocoa production globally.

New varieties of cocoa trees

To counteract this, either new cocoa varieties would need to be bred or impacts of weather phenomena and climate change would need to be at least partially mitigated through modified farming practices, such as agroforestry systems.

Work is being done to modify cocoa tree varieties to be more resistant to droughts and extreme temperatures, and climate smart agricultural practices, such as soil and water management, might support the adaptation of cocoa farms to the challenges caused by climate change. Most importantly, diverse agroforestry systems are expected to be one of the most effective adaptation systems available, because they make farms more resilient to impacts or extreme weather events and diversification of crops makes the household more resilient to market shocks.

For these efforts to become mainstream, infrastructure and investment capital are needed to support and incentivize farmers to transition to climate-smart agriculture, including diverse cocoa agroforestry.

Carbon removal and capture

Companies are increasingly incorporating climate targets and commitments in their sustainability agenda. As a result, and following many other sectors, carbon (removal) programmes are being developed in cocoa – usually linked to agroforestry – to achieve targets and/or to compensate emissions.

Valorising the carbon captured in cocoa trees – and therefore paying the farmers more for their environmental services – could lead to additional income streams for farmers and thereby incentivise farmers to make their farmer more climate resilient through agroforestry and other interventions. However, there are also concerns about carbon capture programmes.

General challenges

Some of the key issues are not cocoa specific. An over-reliance on offsets distracts companies from urgent and direct emissions reductions, hence slowing down reduction of overall global emissions. Although some carbon credit projects are third-party certified, this does not always turn out to be adequate, and can result in human rights abuses, food insecurity, land grabs and community disenfranchisement.

At the same time, because climate action globally has been lacking for several decades, the latest IPCC reports have indicated that all SDG-aligned pathways to 1.5 degrees must now include carbon removals. In these pathways, removing carbon from the atmosphere must come on top of steep reductions of greenhouse gases; and only a small amount can be used to compensate for hard to abate emission reductions.

Those corporations that seek to go the extra mile and only want to invest in best-practice carbon offset approaches, have struggled to identify carbon removal projects with proven strong social credentials even though climate standards for carbon credits on the whole seem to receive greater scrutiny, and hence are (slowly) improving.

The need is great for guidance for ‘what good looks like’ for carbon removal projects with respect to human rights due diligence, land rights and control, income and benefits sharing, gender, grievance mechanisms, workers’ wages and rights, meaningful participation, and food first approaches. Other key issues include:

Double counting/claiming

There is a risk of double counting, where companies can count the carbon captured in their programme, but the same tonnages can also be included in government climate commitments. This is not only a risk within public (Nationally Determined Contributions) and private commitments (Voluntary carbon market and scope 3 accounting), but also within supply chains where for instance two companies are buying oranges and coffee from the same producers and both claim benefits.

Permanence

Cocoa agroforests store far less carbon than the tropical forests they have historically replaced, and though cocoa agroforests can store more carbon than monocultures, there are concerns about the permanence of carbon sequestration through cocoa agroforestry, especially because farmers may not always be able or willing to maintain the cocoa agroforestry system in the long term. Furthermore, there is a limited lifespan for cocoa trees, meaning that carbon captured in a cocoa tree in 2022 will be released in 30 years or so at the end of its lifespan. Though replanting can over time compensate carbon losses, this still could lead to negative effects, either temporary or permanently. With increasing climate instability, wildfires or droughts could also inadvertently release large amounts of captured carbon into the atmosphere., Although there are mechanisms in place to

account for this risk²¹, increasing consequences of climate change in West Africa create serious risks for the permanence of captured forest carbon.

Additionality

Emission reductions/removals need to be additional, meaning that the capture only counts for future capture, not for existing systems. This means that farmers who are already working in agroforestry systems, will be excluded from company programmes that aim to meet the additionality requirement for carbon credits. This is the so-called paradox of additionality: farmers who currently grow cocoa in monoculture will be rewarded the most, whereas farmers who are already in diverse agroforestry systems will be excluded.

Deforestation and removal

Restoration of deforested areas and degraded forests within landscapes where cocoa is produced is another important measure for increasing the carbon capture and storage, as well as other ecosystem services, in these landscapes. Since the global cocoa sector has benefited from past deforestation, it is a joint responsibility to remediate these past damages and support the restoration of landscapes in cocoa producing countries.

Carbon insetting and offsetting

In the case of companies wishing to reduce or remove emissions in their own supply chain (or for those of their customers) further downstream in the supply chain, this process is called carbon insetting. If companies want to compensate emissions outside of their own supply chain/footprint through certified carbon credits, this is called carbon offsetting.

Fair farmer value and farmer risk

It is not always clear if the farmers actually receive payments for the carbon capture activities on-farm, nor how much they receive. In the case of carbon insetting companies might not actually pay for credits but just implement their agroforestry programmes and use carbon capture as a way to justify these investments internally. Additionally, there could be unintended consequences of farmers being bound to specific intermediaries if ‘selling’ their carbon units. It is crucial to prevent that

21 Such as buffer pools of credits that can be cancelled out in case of a fire, and the principle of ex-post selling of credits instead of ex-ante to ensure that the reduction/removal actually took place,

carbon becomes another commodity for which the farmer is not paid enough, especially if it requires extra investment/labour or limits their freedom to decide on farming practices. Payments for ecosystem services (including carbon capture) should always be additional; a bonus for a system from which the farmer is already benefiting, not an aim in itself, and companies must be transparent about the benefits the farmers receive.

At a minimum, it is important to ensure carbon offset projects are not decreasing farmer net income (e.g. a minimum price for the credits ensuring producers can be sure the costs of their removal projects will be covered), and that producers see increases in net income as a result of investments. Carbon removal projects should be intentional about contributing to living income for farmers and farm workers, and benefits to farmers and farm workers should be enshrined in the contract. Front running cocoa companies should look at finance for carbon removal projects as part of an overall living income strategy. This means investing in capacity of producers and their communities to calculate and manage their carbon removals, for use as credits or other financial mechanisms, as well as empowering communities to understand and engage in finance for carbon removals.

Removal and reduction

It is important to remember is that there is no room left in our global carbon budget to choose between reducing emissions and increasing carbon capture in cocoa agroforests and landscapes on land. Both need to happen urgently. As such, carbon removal programmes should not replace emission reduction efforts.

Simply put, we shouldn't invest in cocoa agroforestry so that we can keep driving cars and flying airplanes, or deforesting elsewhere. The mitigation hierarchy states that the first step is to avoid and reduce own emissions, which cannot be replaced by purchasing carbon credits.

Specifically, companies seeking to purchase offsets should disclose absolute emissions with disaggregation of scope 1-3 emissions and carbon removals, and climate risks, and types of impacts of carbon removal investments. Companies should have set and made progress against a credible, Science Based Target to a 1.5 trajectory.

Key questions going forward

Most items discussed in this chapter are questions, due to the relative newness of this topic in the cocoa sector. Furthermore, carbon capture systems, despite being around for several decades, are still

a largely unregulated sector. Where certification schemes place a lot of requirements for robustness, this makes compliance complicated, expensive, and therefore often not benefitting farmers.

Further critical conversation, data, and study is required to address key questions. What will actually change for farmers and cocoa landscapes? Does the increased attention for carbon capture in cocoa actually lead to (long term) capture of emitted carbon? Will it bring extra money to the farmer? Will the farmer bear the risks? What is expected in return?

It is crucial that these concerns are addressed. Carbon should not be counted more than once, and certification and verification schemes should be robust and credible, without leading to extensive monitoring and compliance costs for farmers. If carbon capture programmes are developed, this should be done in a way that the farmer benefits and does not bear the risks. Finally, carbon capture programmes should never be used as a substitute for reducing emissions: if companies wish to support carbon capture, they should not claim that this cancels out their emissions, but they must pursue carbon capture as a separate target and continue to report on and reduce their emissions as a stand-alone item.

Agrochemicals

The widespread promotion of agrochemicals is one of many examples of the cocoa sector's attempts to find quick-fix solutions to larger and systemic challenges, such as declining soil fertility from intensive monoculture cocoa production. However, there are many environmental and health risks. And though there can be short-term benefits in the use of agrochemicals, there are serious questions around the business model for farmers.

Projects to support farmers should no longer blindly look to increase the use of agrochemicals. Good agricultural practices (GAP), integrated pest management (IPM), regenerative agricultural practices, the use (and where possible their production on farm level) of organic fertiliser, and especially the implementation of diverse agroforestry are approaches that should be looked at instead.²²

²² For details see Cocoa Barometer 2020

Inorganic fertilisers

Inorganic fertiliser use is part of the “solution packages” offered by many companies to farmers and farm organisations. For two decades, a key component of any company approach has been that farmers should use more chemical fertiliser to increase productivity. Due to a combination of factors²³, prices for these products have risen drastically in 2022. But even before this price increase, many farmers could not afford them leading to situations where the government had to provide them to cocoa farmers at subsidized prices.

No net income increase

Though the use of fertilisers can lead to significantly higher yields, the business case for farmers is unclear. With increased use of agrochemicals, farmers’ input costs increase, while risks are high, and remuneration is very uncertain. A recent IDH study shows that there are many economic risks to farmers in using fertilisers and pesticides. To access agrochemicals, farmers often go into debt. However, many of these farming families afterwards had a lower net income than before. The positive effect of the use of fertilisers on income is currently questionable (IDH 2021: 10, 14, 83).²⁴ Similar stories could be heard in the sector for years, although they were not put into official reports. After the cocoa price crash of 2016/17 some companies advised farmers to reduce fertiliser input as the increased yields would not cover the increased costs.

Increased financial risk

Farmers have to buy agrochemicals upfront and also need to invest in additional labour to apply these agrochemicals. They do not, however, have the assurance of receiving a decent price for the cocoa come harvest time. Where multinationals and producer governments have the ability to hedge future sales on the future markets, farmers are price takers. The high price volatility might lead to a situation where farmers who invested in fertilisers lose money. (Ruf/Kiendré2012, p. 7; Snoeck et al. 2016, pp. 29-30; Ruf 2016, p. 15).

23 Including the effects of both the Covid-19 pandemic and the Russian invasion of Ukraine.

24 As we argue elsewhere in this Barometer, this is not to say that farmers should not invest in Good Agricultural Practices, but that these investments only make sense if an enabling environment of Good Governance and Good Purchasing is in place. The first to act here are governments and industry, not the farmers.

Highly hazardous pesticides

A wide variety of pesticides are used to control pests and diseases in cocoa. Highly disputed and hazardous insecticides are used to reduce crop loss (Pesticide Action Network (PAN) UK, 2018; Bateman 2015, p. 8 and p. 39). The HHP’s used most widely in the West African cocoa sector have been banned in the EU because of their danger to human health and the environment, and Ghana and Côte d’Ivoire are among the main importers of neonicotinoids banned in the EU²⁵. The use of these pesticides warrants close attention, for the protection of both farmers and chocolate consumers, as well as for its environmental effects.

Exposure of children to pesticides

The rising trend of children being exposed to pesticides is a cause for grave concern. The 2020 NORC report indicated that the number of children exposed to pesticides had almost quintupled between 2010 and 2020. The harm to children of exposure to agrochemicals is significant, and can lead to lifelong adverse effects, including respiratory diseases, learning problems and cancer. In addition, prenatal exposure to pesticides can lead to a wide range of birth defects and miscarriages (HealthyChildren.org 2020). Due to these risks, pregnant women and children should never handle pesticides.

Farmer health and safety

Overuse and misuse of pesticides is widespread. Often, farmers are sold unlicensed, fake, or adulterated products by unscrupulous resellers (PAN UK 2018, p. 1). Farmer poverty is a major driver of this, as is a lack of literacy and training, putting the health of farmers at risk (Osei-Owusu/Owusu-Achiaw 2022).

Many farmers suffer from health problems related to agrochemical use without sufficient protective equipment. Spraying, even with approved pesticides, can cause eye and lung damage. Many farmers and sprayers are not aware of the correct use of pesticides and protective measures (PAN UK 2018, p. 2). The lack of protective equipment, farmers eating and drinking during the application of pesticides, and the storage of agrochemicals in close proximity to food and underage children are all common occurrences (Ogunjimi and Farinde 2012, pp. 188-190). It is hardly surprising that residues of insecticides are sometimes found in the blood of cocoa farmers and in samples of groundwater (Sosan et al. 2008, p. 783).

25 See [this recent report](#) by Public Eye, and [this one](#) by INKOTA Netzwerk

Several things are necessary to tackle these challenges. Farmer income needs to be raised, so that farmers can afford protective equipment. Education on the right dosage application of pesticides and use of protective equipment needs to be intensified to prevent adverse impacts on human health.

Environmental harm

Pesticides can cause a wide range of harm to natural ecosystems and can severely threaten local biodiversity. Populations of birds and fish can be strongly affected. Pesticides, and especially Neonicotinoids, are harmful to a variety of pollinators, including bees. Though the impact of pesticides on midge flies are much less researched there are serious indications that insecticides reduce their populations as well, which might lead to a reduction in cocoa yields, as midges play an important role in the pollination process in West Africa (PAN UK 2018, pp. 3-4). The natural fermentation of cocoa is also entirely dependent on thriving insect populations. The adverse impact of pesticides on the health of the environment calls for an alternative approach to pest management

Integrated Pest Management (IPM)

The above points do not take away from the need to protect crops from pests and diseases. In many areas in West Africa, viral crop diseases such as the cocoa swollen shoot virus (CSSV) and fungal diseases such as black pod lead to a loss of 30% or more of the annual harvest. The Witches Broom virus devastated the Brazilian cocoa sector in the 1990s and continues to damage part of the cocoa production in Latin America. Pest infestations, ranging from insects, such as the Cocoa Pod Borer in South-East Asia, through to rats, mice, squirrels, slugs, and snails damage the cocoa tree and its fruits, leading to harvest losses (Bateman 2015, p. 28).

However, this does not automatically mean that extensive pesticide use is necessary, or even warranted. Integrated Pest Management – especially in combination with diverse agroforestry systems – could reduce the need for pesticides significantly. IPM systems are complex, and for them to be implemented successfully, farmers will need financial support and training (Bateman 2015, p. 20; PAN UK 2018, pp. 5-7).

Gold Mining

Driven by poverty

Artisanal and small-scale gold mining (ASM) – known in Ghana as Galamsey – has become a major problem in cocoa growing areas in Ghana and increasingly in Côte d'Ivoire. Rising gold prices and the

struggle to earn a living from agriculture have led to explosive growth in the artisanal and small-scale mining sector in the Global South. It is estimated that up to 2% of cocoa farm land has been lost to Galamsey in Ghana since 2013 (Chandrasekhar/Adogla-Bessa 2022). Farmer poverty and the current cost of living crisis are expected to further drive cocoa farmers to lease or sell their land to ASM gold operators.

Environmental damage

The use of mercury to extract the gold is causing severe environmental damage; the poisoned wastewater is not suitable to drink or to use for irrigation, and contaminated mud run-off from the mines causes additional destruction to rivers and lakes. In many cocoa-growing regions where there is gold, farmers short of money allow small-scale miners to use their land for mining, in exchange for cash compensation, leading to a further loss of land for cocoa farming. Côte d'Ivoire is increasingly confronted with these issues as well. Not only is the number of small-scale miners rising there too, but also some of the rivers coming from Ghana bring their pollution into the neighbouring country. Besides the pollution of soil and water, ASM also destroys the forests and cocoa trees that are on the land when the mining begins, leading to a loss of biodiversity, and also further contributing to changing weather patterns.

Summary

Environmental concerns are relatively recent additions to the global sustainability discourse in cocoa, although they have been felt and challenged by communities in the Global South for many years.

Deforestation

Though the rate of deforestation in Côte d'Ivoire and Ghana slowed down briefly in the late 2010's, they have been on the rise again. Furthermore, rainforests in Indonesia, the Amazon Basin, and the Congo Basin are all under pressure from encroaching cocoa farms. Deforestation causes loss of biodiversity, quickens climate change, and reduces carbon capture. Key tools to tackle deforestation are traceability and regulation. Care must be taken to ensure that measures to combat deforestation do not violate human rights, and also take smallholders into consideration.

Climate change

Climate change is a second major environmental challenge, which is already changing the parts of the world that are suitable for cocoa

production. Combined with the result of West Africa's deforestation, rainfall patterns have already been significantly altered there. New varieties and agroforestry are key parts of the mitigation and adaptation needed, as is reforestation.

Agrochemicals

Increasingly, agrochemicals are being used in the cocoa sector, both Highly Hazardous Pesticides as well as inorganic fertilisers. The use of agrochemicals is pushed heavily by industry to increase productivity, however so far often with no net income increase. Farmers run a risk of not being able to recover their investments, however. Furthermore, health risks through exposure are high, especially to women and children. The environmental harm is significant as well.

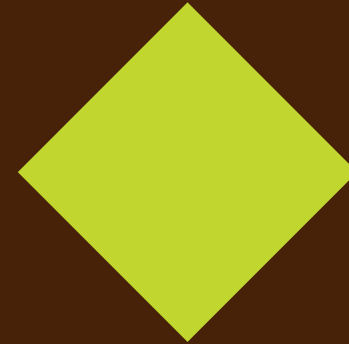
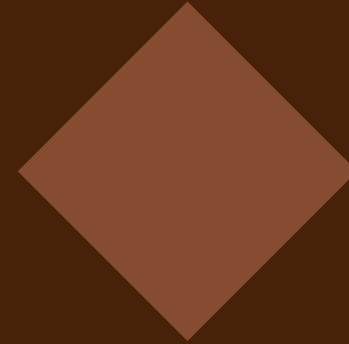
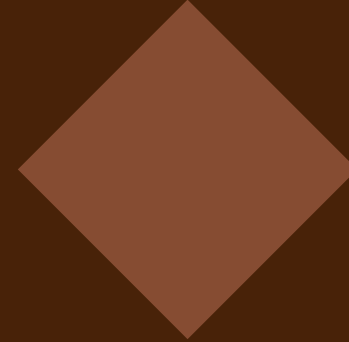
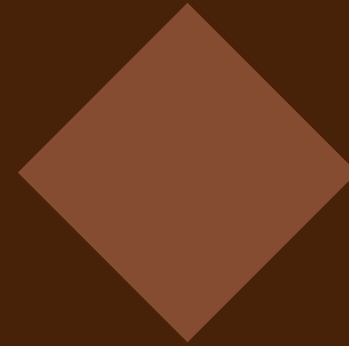
Agroforestry

Agroforestry is an important part of any sustainable cocoa production landscape, providing socioeconomic resilience as well as environmental benefits, although agroforestry should not be seen as a replacement of existing forests, or even as a tool to reduce deforestation. Low adoption and tree survival rates as well as a lack of common definitions currently impede the deployment of diverse agroforestry systems at scale.

Solutions

Diverse agroforestry systems, organic farming, Integrated Pest Management (IPM), landscape approaches on joint monitoring and transparent data sharing on deforestation hotspots, as well as regulation in both producing and consuming countries are part of a tapestry of approaches needed to start tackling the environmental challenges in cocoa. As with other issues in the cocoa sector, ensuring a living income for cocoa farmers would also go a long way towards relieving the pressure on forests, wildlife, water, and soils.

4. Human rights



Human Rights

Although the focus on human rights violations in the cocoa sector is often on child labour, there is a wide range of problems facing cocoa-producing communities. Gender inequality, (infant) malnutrition, lack of access to education, human trafficking, insufficient health care facilities and sanitation, insecurity of land and tree tenure and rule of law, labour rights violations for smallholders, workers, and tenants; the list is long and by no means comprehensive.

Though every issue requires specific approaches, at the root of all these human rights issues is the structural poverty of rural communities. As living income is a human right, any human rights approach to the challenges in the cocoa sector should include strategies to address poverty and to close the living income gap.

Producing nations are making progress in addressing key challenges, notably in access to education, health care, electrification and drinking water in rural areas. Efforts are also being undertaken to strengthen producer price, roll out of social security systems, and the establishment of the interprofessional organisation to defend the rights and interests of producers.

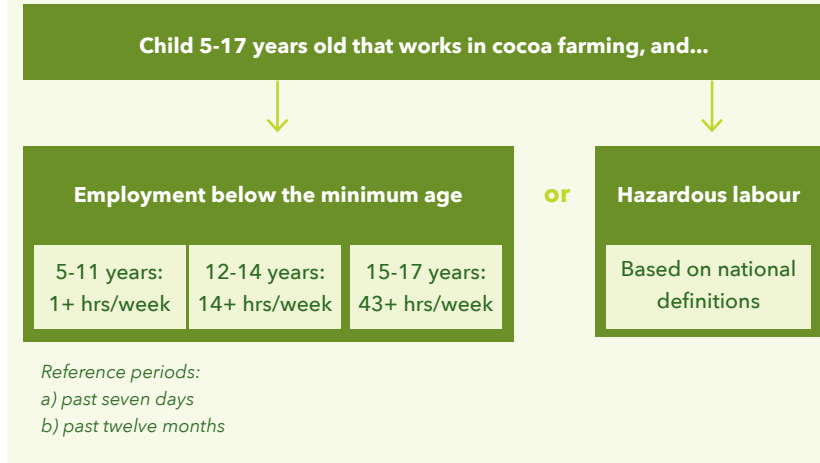
Cost of living crisis

The Covid-19 pandemic has had a tremendous impact on cocoa producing countries. Prices for many daily products increased significantly, and lockdowns caused major reductions in income. Due to school closures in West Africa, child labour rates also went up. The Russian invasion of Ukraine has intensified the already high inflation rates in cocoa producing countries.

Prices for staples such as food, transportation, as well as for agricultural inputs have rising dramatically, especially since the beginning of 2022. The fact that the cocoa price has not gone up in a similar way poses a tremendous hardship for cocoa growing households throughout the world.

Child labour

Global definitions of child labour



Definitions of child labour

Not every child helping their parents on a cocoa farm is immediately involved in child labour, and not every task on a cocoa farm is immediately a cause for concern. There are, in short, three gradations of children working on farms.

- **Child/light work** can be summarised as a child that sometimes helps out on a farm for a limited time doing work that is appropriate for their age, and that does not interfere with their schooling or their possibility to be a child. Light work should always be done under adult supervision.
- **Child labour** is work that interferes with the child's schooling or their possibility to be a child, or that endangers the health and wellbeing of the child. It also refers to labour for children under the specific age of 15 years old. These are defined in ILO's Core Convention 138, which is ratified by all major cocoa producing and consuming countries, with the exception of the United States of America.
- **The Worst Forms of Child Labour (WFCL)** are defined under ILO's Core Convention 182, which is ratified by every country on earth. They can be split into conditional and unconditional Worst Forms.
- Unconditional WFCL, such as trafficking, slavery, and forced labour

(as well as several other categories not applicable to cocoa) are defined at a global level under ILO's Core Convention 182, which is ratified by every country on earth

*- Hazardous child labour is also called **Conditional WFCL**. They are called conditional because the conditions of hazardous activities are defined at a national level through consultative tripartite processes.*

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National definitions of hazardous child labour

In West Africa, the work of children on cocoa farms is part of daily life. Similar observations can be made in agricultural production across commodities and across the globe. Careful definitions are crucial to differentiate between permissible child/light work and forbidden child labour, and to ensure that helping out at the farm as well as youth apprenticeships are not confused with child labour. In that light, the governments of both Ghana and Côte d'Ivoire have set up national definitions of hazardous child labour. Hazardous activities include land clearing, carrying heavy loads, exposure to agrochemicals, use of sharp tools, working with dangerous machinery, and working long hours.

Approximately 1.5 million children are working in cocoa production in Côte d'Ivoire and Ghana (NORC 2020). Of these, 95% are exposed to the (conditional) worst forms of child labour – because they are involved in hazardous activities as defined by national laws, such as working with dangerous tools or harmful pesticides. The vast majority of child labourers are exposed to more than one type of hazardous work.²⁶

Clear communication

An important role for national governments, as well as various stakeholders involved in the cocoa sector, is to ensure clear and consistent communication and public awareness around key issues. Whereas for several years progress was being made in acknowledging the challenges, the past years some government agencies have started to downplay the issue of child labour, often conflating child work with the hazardous child labour. Assertions that most children would be merely helping on the farm after school do not correspond with the reality, which is that the children are in child labour because of the activities they are involved in.

Government action

There is an important role for national governments with the support of development agencies in combatting child labour, especially around access to education, social protection, awareness raising, and rule of law. Governments in Ghana and Côte d'Ivoire have run sensitization and awareness raising campaigns throughout their countries for the better part of the last decade, and national child labour monitoring systems have been in place for many years. Part of their challenge here is low coverage and weak implementation, but also that there is not much linkage with the necessary referral systems. Both Ghana and Côte d'Ivoire have developed and implemented an extensive legal framework, as well as a range of relevant legal implementation initiatives. Beyond law enforcement, support mechanisms are necessary, as are national policies and programmes around quality education, social protection, and access to services and infrastructure.

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Enforcement

Care must be taken when enforcing child labour legislation. In the case of (hazardous) child labour on family farms, the best recourse is often aiding cocoa farming households in taking away the reasons why children are working in the first place.

This could be through providing resources so that children can attend quality education, helping the family to access essential services, social protection and income generation activities, or a variety of other interventions. Awareness raising and community development are also a part of the necessary interventions there. In the case of unconditional worst forms of child labour, however, relevant authorities should consider stronger interventions, as forced child labour and trafficking are criminal offences.

Audits and zero-tolerance vs monitoring and root causes

Random audits and adopting a zero-tolerance policy for any forms of child labour seem to have a counter-productive effect, making child labour even more hidden but no less prevalent. It is now a shared belief of the sector that what is necessary is structural monitoring – through e.g. a credible CLMRS – coupled with tackling systemic root causes – such as farmer poverty, absence of (access to) quality education, inadequate local infrastructure and services, inadequate labour services in cocoa growing communities, and lack of awareness – through broad community-based development projects.

26 See https://www.cocoainitiative.org/sites/default/files/resources/ICI_Technical_Summary_2018-19_NORC_survey.pdf

Access to quality education

Where schools are absent, children are more likely to work on the farms.²⁷ Primary school attendance has increased in both Côte d'Ivoire and Ghana²⁸, although the quality of education still needs to be significantly improved. For both major West African cocoa producing countries, secondary education is a larger challenge, further exacerbating the issue of child labour, as children under the age of fifteen or sixteen – depending on the country – should go to school and cannot work full-time. In Ghana, secondary education on paper is free and universal, however the education system cannot cope with the numbers, and coverage throughout the country is far from complete. In Côte d'Ivoire, coverage is much less universal. There is also a strong gender imbalance in school attendance, which becomes more marked at higher ages. Often, older girls are kept at home to help with various household tasks.²⁹

Regional and landscape approaches

In complement to companies' efforts to identify and monitor risks and impacts, landscape approaches are a way to implement prevention and remediation measures - pulling all actors together within a given geography. It is important to not only tackle child labour (and forced labour and child trafficking) at farm level or just within the cocoa growing communities, but to also understand the broader landscape and regional context in which these problems take place. Merely putting the focus on child labour in cocoa could result over time in a displacement of the child labour from cocoa to other less scrutinised sectors, such as fisheries for the local market. Integrated area-based approach such as the Child Labour Free Zone mechanism in Ghana are examples of how this could work. Furthermore, when there are cases forced labour or trafficking – child labour or not – it is also essential to bring in the governments of the source countries of these migrant labourers, such as Burkina Faso and Mali.

27 See <https://www.cocoainitiative.org/knowledge-hub/resources/education-quality-and-child-labour-review-evidence-cocoa-growing>

28 In the case of Ghana, primary education is almost universal and has been for years.

29 This is also because secondary schools are often far away which generates safety concerns

Child Labour; data from the questionnaire

When asked about their activities on child labour, there is a tremendous variety in answers provided by the chocolate and cocoa companies.

Though every company in the questionnaire has programmes to reduce child labour, what these programmes do differs considerably. Furthermore, figures are often not comparable, and data varies tremendously.

One reason for these major variations might be that systems to detect child labour can vary strongly in how well they work to reduce child labour. Another reason can be different methodologies of counting children, and the depth of analysis.

Children detected labouring not in the cocoa plantation but on other fields of the family might be counted in one project and not in another one; children walking unaccompanied by adults to the plantation again might be counted or not.

Not every programme, it seems, is as efficient in tackling child labour. An agreed-on methodology on how to detect child labour, count the children and remediate harm does not exist (see the box on CLMRS).

Even just going by the numbers reported in the questionnaire for this publication, child labour is still widespread; most of the farms in cocoa growing areas are still not covered by child labouring monitoring systems. Even then, nearly 65,000 children were reported in child labour in the questionnaire. Considering the fact that there are approximately 1.56 million children in child labour in the cocoa sector in Cote d'Ivoire and Ghana, it is clear that current industry interventions are nowhere near enough to significantly reduce these human rights violations.

Progress

Though there are more children in hazardous child labour in cocoa than ten and twenty years ago, the severity of these cases seems to be decreasing. On average, children are involved in fewer kinds of hazardous activities, and the number of hours they are working on the farms is also reducing. However, due to the strong increase of numbers of households involved in cocoa production, the absolute number of children involved in hazardous child labour is still growing.

Increased ambition is needed

Industry, producing governments, and international organisations tried to come to new joint ambitions to combat child labour for several years. Due to much internal division between various actors this so-called Children First in Cocoa initiative never materialised. Investments and ambitions must be increased by several magnitudes³⁰ if targets on child labour are ever going to be more than greenwashing and empty words. The upcoming due diligence regulations should provide cause to increase ambitions; promises must be enforced with real consequences in the case of a failure to meet them.

Community based prevention vs supply chain based remediation

The increased focus on prevention and community development is an important step. However, it should not be seen as an alternative to individual and collective responsibility of companies to respect human rights in their supply chain and to remedy found cases. Both prevention and remediation are needed. Moving away from a supply chain based approach poses a real risk that it companies become less accountable for the child labour in their supply chain. Both community development and supply chain responsibility are needed. They are not mutually exclusive.

Move away from transparency

When the last Barometer was published, there was a trend of more and more companies reporting on the numbers of cases in hazardous child labour. This increased transparency was a necessary improvement and welcomed in previous Cocoa Barometers. However, this trend is reversing; increasingly companies refuse to publish numbers on child labour. This trend is deeply concerning; what is needed is more transparency and accountability, not less.

Child Labour Monitoring and Remediation Systems

A Child Labour Monitoring and Remediation System, or CLMRS, is a means of identifying addressing and preventing child labour, embedded in a supply-chain or community structure. Designated local liaison people conduct regular visits to every family and speak to both parents and children. Information from all monitoring visits is sent to a central database. When children are found to be in or at risk of child labour, suitable remediation is provided. Various forms of support are possible at child, family, cooperative, or community level; from the provision of

30 In September 2020, the International Cocoa Initiative's director called for a 'massive expansion' of collaboration and investments to tackle child labour. (Confectionery Production 2020).

birth certificates or school materials to the establishment of an income generating project for the women of the village. Once a child is entered into this system, their exposure to child labour will continue to be monitored, as well as their school attendance.

Best practice

Impact analysis shows that these systems – when done properly – identify around 60% of the children in a community involved in child labour. About half of the identified children are no longer in child labour within three years. Though these numbers are encouraging and show a higher success rate than any other child labour intervention, even this best practice can only stop around 30% of child labourers from engaging in hazardous activities.

Dilution of impact

These systems were first developed for cocoa by the International Cocoa Initiative (ICI) on behalf of Nestlé. At first, other companies started rolling out similar CLMRSs, some through the ICI, others through their own projects. To reduce the costs³¹ associated with implementing a comprehensive CLMRS, alternatives have been developed. Though the argument is that this makes the interventions more easily scalable, there is a growing risk that different monitoring systems using different methodologies could have radically less impact, even though they are all using the same name.

Components of a credible CLMRS

To prevent a devaluation of the terminology and a dilution of impact, there is an urgent need to establish common definitions, to define standards and benchmarks, and – as the upscaling advances – to improve coordination, harmonisation, and coherence. A credible CLMRS executes at least four functions; awareness raising, identification of cases, provision of support, and follow up.

A CLMRS is only credible if a company annually makes public:

- *Number of households covered by the CLMRS (in absolute numbers, as well as in % of total sourcing, both direct and indirect)*
- *Number of children in the CLMRS (in absolute numbers, as well as in*

31 It is worth noting that a CLMRS system costs around US\$50-\$85 per cocoa growing household per year, which is only about 6% of the costs of purchasing the cocoa at farm gate price. The farm gate price is only about 5%-6% of the cost of a bar of chocolate at final sale. It is an interesting message by the cocoa sector that even a fraction of the final retail price is already considered too much in tackling an issue as egregious as child labour.

% of total sourcing, both direct and indirect)

- *Number of cases identified in (worst forms of) child labour*
 - *Number of children no longer in (worst forms of) child labour after one and two follow up visits*
 - *Kind of support provided*
-

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Only organised farmers

Most CLMRSs are only available in farming communities or cooperatives that are part of company programmes. According to recent EU research³² only 10-20% of farmers in the cocoa supply chain receive some intervention programmes. These tend to operate in the better-organised segments of the cocoa sector. However, most cocoa is still not traceable, and the non-traceable cocoa potentially comes from areas where producers are not organised into farmer groups and risks of child labour are likely higher.

Poverty

Even the most effective child labour interventions will not be able to solve the challenges if the root causes of child labour are not addressed - in particular the structural poverty of cocoa growing communities and access to quality education (UNICEF 2018). As such, the current CLMRS approaches can only be seen as part of what needs to happen. Any child labour approach must directly and clearly tackle farmer poverty.

Labour rights

Though in West Africa cocoa is largely grown by smallholders, wage labourers play a large role in the workforce in cocoa in Latin America. Furthermore, seasonal hired workers are common in the cocoa sector across the world. In Ghana, hired labour is often used to cope with peak workloads, although in Côte d'Ivoire this seems to be less common (Hainmueller/Hiscox/Tampe 2011: 30; Selten 2015: 25-27; Bymolt/Laven/Tyszler 2018: 165-166). In Latin America, where cocoa plantations are often a lot larger, there is much more wage labour.

Wage labour in West Africa

The situation of most workers on West African cocoa farms is precarious. A large proportion of the employees work on a temporary basis and

32 See https://knowledge4policy.ec.europa.eu/publication/ending-child-labour-promoting-sustainable-cocoa-production-c%C3%B4te%2%A0ivoire-gha-na_en

without employment contracts. Most workers in Ghana on cocoa plantations earn much less than a living wage (Smith 2017). As early as ten years ago, studies pointed to the sometimes extremely low wages, with workers on cocoa farms in Côte d'Ivoire and Ghana earning between €150 and € 300 euros a year, many of them even less. (Republic of Côte d'Ivoire 2008; Republic of Ghana 2008). As a result, there is a shortage of hired farm labour despite considerable under- and unemployment; people are neither willing nor able to work at below-subsistence levels. Most of the farmers cannot meet higher wage demands, as they earn very little themselves. Moreover, the income of female day labourers in cocoa farming is significantly lower than that of men. There are reports of bonded labour, i.e. people having to work off debts on the plantations and therefore not allowed to leave their jobs until they have repaid their debt (Republic of Côte d'Ivoire 2008: 54ff; Republic of Ghana 2008: 151-157).

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Wage labour in Latin America

Many cocoa farms and plantations in Latin America use hired labour; large plantations even depend on it. This can lead to challenges around labour rights and the freedom of association. Annually, the International Trade Union Confederation (ITUC) publishes an analysis on labour rights violations. Brazil, Colombia, and Ecuador are rated with "No guarantee of rights" (category 5, worst possible rating), Peru with "Systematic violations of rights" (4), Mexico with "Regular violations of rights" (3) and the Dominican Republic with "Repeated violations of rights" (2). In the 2021 ITUC-report, Brazil and Colombia are on the list of "The world's 10 worst countries for workers" (ITUC 2021). Though child labour plays a much smaller role in Latin America than in West Africa, in Brazil, courts are investigating the responsibility of multinationals concerning cases of child and forced labour in the cocoa sector.

Worker organisation

Strong worker and farmer organisations could help both farmers and their employees to claim their own rights. So far, however, only a small proportion of workers and farmers are organised, and existing organisations are too weak to enforce higher prices. Of the main cocoa producing countries, only Ecuador has ratified ILO Convention 141 on Rural Workers' Organisation, launched in 1975, which promotes the formation of associations for employees, tenants, small farmers and smallholders. None of the major cocoa producing countries presently has a policy in place to support farmers and workers to get organised.

The work of international trade unions in the cocoa sector

The international trade unions, united under IUF and EFFAT, work to build union networks in the main cocoa and chocolate trading, grinding, and processing companies. Recent work in Ghana has included occupational health and safety (OHS) training and assisting affiliates to lobby the government for stronger OHS legislation. The unions remain committed to work to eliminate child labour in agriculture. For the International Year for the Elimination of Child Labour the IUF produced a leaflet of demands - welcoming the focus on child labour but stating that for it to be effective there had to be recognition that the majority of child labour (70%) was in agriculture and sector-specific strategies and plans must be developed and implemented. This call was repeated at the 5th Global Conference on the Elimination of Child Labour. An IUF delegation (including a representative from GAWU) took part in the Durban meeting and lobbied successfully for a Call to Action that included specific commitments to work on eliminating child labour in agriculture. The international trade union movement successfully lobbied at the ILO for the upgrading of OHS standards to be included amongst the core conventions/fundamental rights and principles at work. This will assist trade unions to put more pressure on governments and employers to improve OHS.

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Tenants and sharecroppers

Most of the sustainability efforts in the cocoa sector are aimed at the cocoa farmers, generally considered to be the landowner. However, many of the people working on the farms are neither hired labourers nor farm owners but are tenants in some way. Though these systems vary, few sustainability approaches so far have taken their situation into account, and this will be something the cocoa sector needs to look at in far more detail in the coming years.

The position of wage labourers, sharecroppers, and tenants, need to be brought much more into the various policy conversations in the cocoa sector, from livelihoods through to representation and workers' rights.

Health care and sanitation

One of the major challenges in rural cocoa growing communities is the lack of sufficient health care and clean drinking water, combined with an environment in which tropical diseases often flourish. The lack of clean drinking water, the prevalence of diseases endemic in cocoa growing

regions and complaints such as back and joint pain and poor eyesight lead to significant consequences. When health facilities are available, they are often not affordable to most rural families, causing them to wait with getting help until illnesses have become much more serious, and are harder - and more expensive - to treat. Poor health, furthermore, leads to loss of productivity and income for cocoa farms, and increases reliance on family labourers, including children.

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Gender inequality

Women run many cocoa farms in West Africa. The available data are unreliable, but for Ghana roughly a quarter of the cocoa farms are run by women (Marston 2016), and women work as labourers on cocoa plantations, often at lower pay than men. Their role is often not recognised or remunerated accordingly. In many cases, women are excluded from land ownership, and partly due to a high rate of female illiteracy and innumeracy, often do not share in the rewards of the family's farms. Additionally, women are often confronted with sociocultural systems which prevent them from running their cocoa farm as a viable business. They also have a harder time accessing extension services, credits, and certification than their male counterparts, and are often underrepresented in farmers' organisations, public meetings, and leadership roles in communities.

Although there are differences between the tasks of men and women, women are engaged in most of the steps of cocoa production, from preparing seedlings to selling beans. In addition to supporting cocoa production, women are involved in household activities, child-rearing, and food production, which adds up to a heavy workload.

Unless specifically designed to do so, cocoa sustainability programmes often fail to reach the women in cocoa growing communities. This has negative consequences for the women themselves, and as such is reason enough to ensure that company and government programmes are set up in such a way as to ensure women participation and inclusion. It is important that women are not (purposefully or inadvertently) excluded.

Gender-inclusive design is also essential because women are change agents in and of themselves. Projects as diverse as poverty alleviation, infant nutrition, forest preservation and child labour sensitisation, all become so much more effective when women in the communities are involved. If women often do the labour on the fields, it is imperative they also receive training in Good Agricultural Practices. If women can earn more income, they tend to spend more on essential household items

and services than if their male counterparts earn this money. Ensuring that women are involved in the child labour awareness projects results in broader community acceptance. Giving women land and tree tenure rights makes for better protection of forests and preservation of existing ecosystems.

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Increasingly, projects do involve women's perspectives, but gender equality and female centred projects are still anything but universal. A sustainable improvement of the situation of women also includes a change of attitude of the men in the communities. The transformation from traditional, often restrictive customs to more equality between men and women needs greater efforts than are underway presently. There is a major responsibility for governments in producing nations in this regard, as well. Gender equality is a truly cross-cutting issue and should be a central component in all programmes of the cocoa sector.

Summary

Although the focus on human rights violations in the cocoa sector often is on child labour, there is a wide range of problems facing families in the cocoa sector. Gender inequality, (infant) malnutrition, lack of access to education, insufficient health care facilities and sanitation, insecurity of land and tree tenure and rule of law, labour rights violations for smallholders, workers, and tenants; the list is long and by no means comprehensive.

Understanding what does and does not constitute child labour is an important first step in this conversation. Not all work done by children on a farm is child labour. However, there are 1.5 million children in West Africa's cocoa farms that are performing age-inappropriate labour, putting them in Child Labour. Most of them are involved in hazardous labour, which also makes it the Worst Forms of Child Labour.

There is an important role for national governments and development agencies in combatting child labour, especially around access to education, awareness raising, and rule of law. Though there are more children in (the worst forms of) child labour in cocoa, the severity of these cases seems to be decreasing. On average, children are involved in fewer kinds of hazardous activities, and the amount of hours they are working on the farms is also reducing. However, due to the strong

increase of numbers of households involved in cocoa production, the absolute number of children involved in (the worst forms of) child labour is still growing.

Investments and ambitions - of both companies and governments - must be increased by several magnitudes if targets on child labour are ever going to be more than greenwashing and empty words. These increased ambitions must be coupled with mandatory regulations; promises must be enforced with real consequences in the case of a failure to meet them.

Prevention approaches through community outreach are a key part of these interventions, as are supply-based approaches - child labour monitoring and remediation systems (CLMRS). When done properly, CLMRSs identify around 60% of the children in a community involved in child labour. Both community development and supply chain responsibility are needed. They are not mutually exclusionary.

Women run many cocoa farms in West Africa, but their role is often not recognised or remunerated accordingly. Additionally, women are often confronted with sociocultural systems which do not enable them to run their cocoa farm as a successful business. Unless specifically designed to do so, cocoa sustainability programmes will often fail to reach the women in cocoa growing communities. Gender agnostic interventions might even lead to greater inequality between men and women.

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5. Racism, representation and decolonisation



Racism, Representation, and Decolonisation

Why do Europe and the United States have most of the power in the global commodity trade? Why are all the large cocoa and chocolate companies – and therefore the decision-making power – based in the Global North, far from where the key crop is grown? How come there are no West Africans in senior positions in the cocoa and chocolate industry? Why is it that voices of NGOs from the Global North are more easily heard than those from the producing nations themselves? These questions are an elephant in the room around sustainability conversations in any tropical commodity. And though the few pages of this chapter, clearly, are never going to be enough to do this topic justice, perhaps they might be a starting point for a sector-wide conversation and internal reflection.

The current reality of the global cocoa trade – and the injustices and inequality that it contains – cannot be understood without the context of the past; the history of colonization informs trade structures that have transitioned into our era. The current cash crop driven economies in West Africa are a direct result of both colonial rule as well as by extensive interventions by the IMF and World Bank.

Though Europe and North America send so called development aid towards the Global South, this is dwarfed by the value extracted from the Global South in cheap labour, agricultural products, and other commodities. The Global North still appropriates the vast majority of the wealth of its former colonies.

Historical injustices resonate in current sensitivities

Straddling the coast of Ghana, halfway between Accra and Côte d'Ivoire, lies Fort Elmina. This historical slaving station is a symbol of the horrific transatlantic slave trade. Generations of West Africans have grown up with the knowledge of this historical injustice. However, use of the term "slavery" does not just refer to a historical injustice of centuries past, it is still often used in the context of cocoa. Some actors, especially in the Global North, have used the concept 'modern slavery' liberally over the past decades. It is not only used to describe cases of forced labour – which remains a real issue in the cocoa sector – but has also often been used as a blanket term for many different labour violations in the cocoa sector. The intentions of especially civil society and media in the Global North might have been good, but it exhibits a lack of understanding of the

deep historic and painful resonance of the word "slavery". Stakeholders should critically review their communications and reflect on whether this is always the appropriate terminology to use.

Representation

All too often, the cocoa sustainability conversation is about farmers, without having farmers at the table. It is about African or Latin American interests, without these interests being represented by African or Latin American organisations and governments. This has serious and far-reaching implications. Interventions are generally chosen that are convenient to those in power, not to those who must implement the interventions. Language is used that might further inflame historic injustices, or simply confirm existing power imbalances.

Barriers to representation can vary widely; absence of translation, costs of travel, visa restrictions,³³ or an absence of funding for hours, can already pose a high threshold. Prejudice and discrimination against people of colour abound – both in the Global South as well as against people of colour in the Global North.

The lack of representation at senior level in the chocolate and cocoa sector is stark. Of the sixteen board members of the World Cocoa Foundation, not one is from West Africa. None are black. The Executive Secretary of the Côte d'Ivoire and Ghana Cocoa Initiative – an Ivorian national – was not able to break the glass ceiling after decades within the cocoa industry as director. He was elevated to executive position by a West African initiative, not by western multinationals. Though it is best not to have the illusion of representation, these examples do show where the power lies, and in whose interest this power is exercised.

The fact that farmers and West African governments have been calling for higher prices for many years, but that companies simply are not willing to broach that subject is a good example of this.

A lack of representation can be unintended – part of the problem of privilege is that it is often blind to its own privilege – and to address this, all stakeholders should actively question to what extent this might affect their

33 Visa restrictions are definitely intended barriers; their whole designed purpose is to exclude people from the Global South to move freely and at will. Stakeholders in the cocoa sector would do well to ensure that activities for a global dialogue – if held in person – are held in countries with the least possible travel restrictions for Southern participants.

own operations. Whether or not the lack of representation is intended, the lived reality for those that are not represented is equally harsh.

There is a direct power imbalance between those with money - and therefore decision-making capacity - and the recipients of support. Whether these are company-initiated or run by international organisations or NGOs; in donor-client relationships, southern implementors and communities are unequal partners. Not only is there a financial power imbalance, but in the north-south relationship, generally the risk is also largely borne by the “clients” in the Global South.

The voice of farming communities as well as of producing governments to actively tackle the issue of low commodity prices continuously is counteracted by global industry, for example. Instead, the importance is stressed of agronomic approaches, implying that it's the (lazy or uninformed) farmers that are to blame for their own poverty. If decisions are made by those in Europe and the United States, those decisions tend to favour those in power.

The division of labour in the production chain has been inherited from the colonial period; the decision making power lies elsewhere than in West Africa. Implicitly, there is an assumption that the injustice and inequality could be dismantled within the current division of labour. It is an open question whether this would even be possible.

Progress

The past years have seen some major steps of self-organisation and representation in West Africa, both at the level of government and of civil society. The collaboration between the governments of the two largest cocoa producing nations to set up the Côte d'Ivoire and Ghana Cocoa Initiative is a seminal development, where producing nations are working together in using their market power to demand structural reform in the way cocoa is being traded. Recent developments that Cameroon and Nigeria are seeking closer collaboration with this initiative are important steps forward.

At civil society level, both Ghana and Côte d'Ivoire have seen the formation of broad collaboration between civil society and farmer organisations, to ensure they can speak up on behalf of rightsholders in the community. The Ghanaian Civil Society Cocoa Platform (GCCP)³⁴ and

34 <https://gccp.org.gh/>.

the Plateforme Ivoirienne pour le Cacao Durable³⁵ both bring together dozens of CSOs and producer organisations, speaking out at both a national and international level.

Dismantling unjust structures

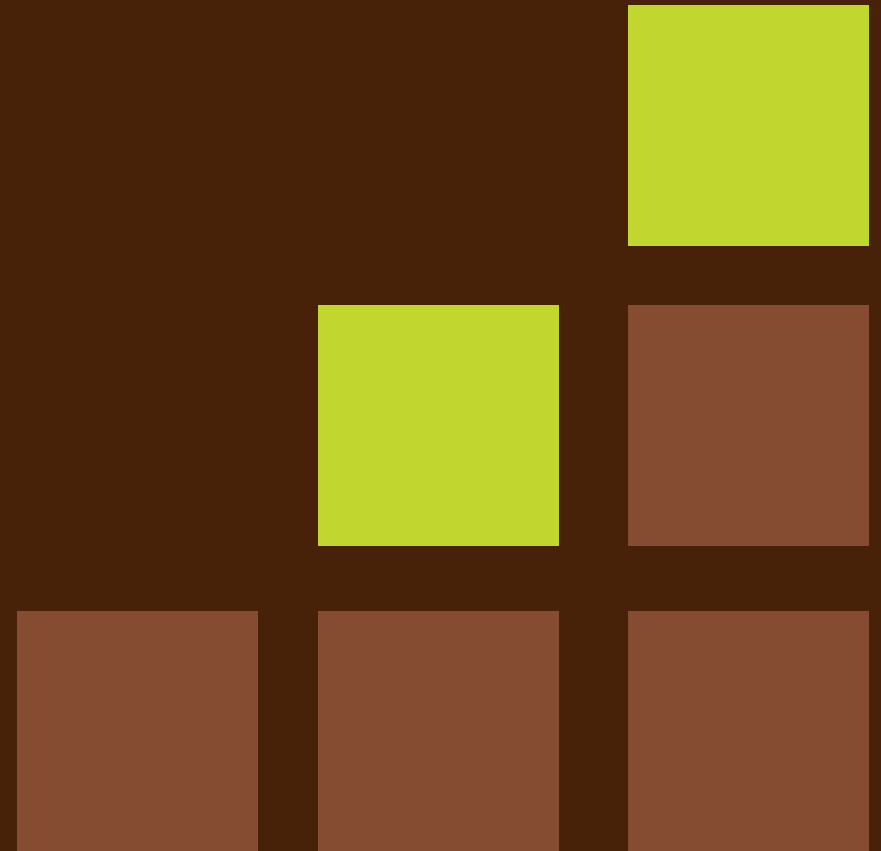
Bridging the vast gap in representation will take a long time - and proactive engagement by everyone. However, change is always a day away if the journey never even gets started delivering on the low-hanging fruits, such as paying higher farm gate prices and inviting farmers to the global cocoa dialogue. There will also be setbacks, and part of the challenge is to not expect perfection from the start. Southern leadership - including farmers, researchers and activists - needs time, space, and resources to build its voice and power. Dealing with the topic of racial injustice will require every actor - industry, government, and civil society alike - to recognise and openly deal with their own role in maintaining or dismantling the globally unjust structures that we currently all operate in.

Summary

The current reality of the global cocoa trade - and the injustices and inequality that it contains - cannot be understood without the context of the past; the history of colonization informs trade structures that have transitioned into our era. Furthermore, representation matters. All too often, the conversation is about farmers, without having farmers at the table. It is about African or Latin American interests, without these interests being represented by African or Latin American organisations and governments.

35 <http://www.platformecacao.org/>.

6. Market Developments



Market Developments

The global economy is in troubled water; the Covid-19 crisis is not over, many value chains are still disrupted, and the Russian invasion in Ukraine has caused problems and strongly increased costs and prices in many global value chains, pushing even more people into (extreme) poverty. The cocoa sector was and is affected by this on different levels, but for cocoa and chocolate companies, business remains surprisingly stable, for many companies even extremely profitable.

Desperate times for cocoa farmers

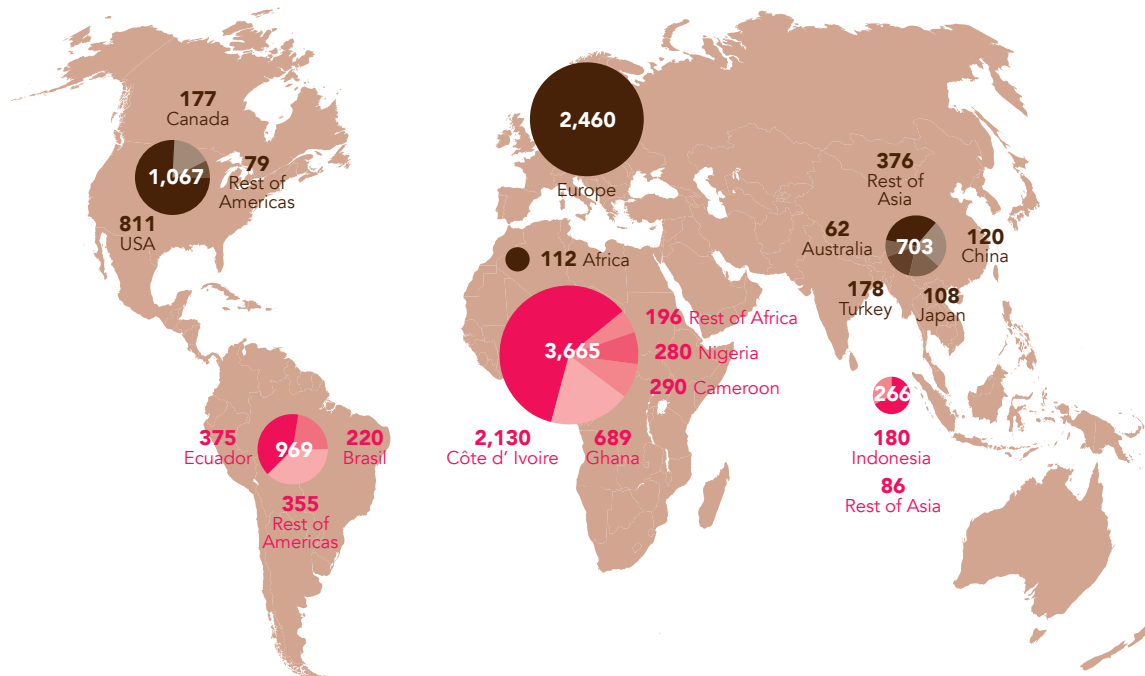
For cocoa farmers, these are dire times. Prices of staple foods increased sharply at the beginning of the Covid-19 crisis. After the first shock, prices decreased and stabilised, but often well above pre-pandemic levels, coupled with high inflation rates. During 2022, the situation for farmers worsened significantly. Prices for fertiliser already started to rise in 2021, but after the Russian invasion of Ukraine in February 2022, their cost exploded. To exacerbate things, fuel prices rose considerably, with a

Production / Consumption

Cocoa production in 1,000 tonnes 2020/21 (forecast)

Domestic imports of cocoa in 1,000 tonnes 2020/21

Source: ICCO 2022, Table 3,9



direct impact on overall inflation including food costs in cocoa producing countries. Farmers are confronted with massively higher costs to feed their families. Although minimum farm gate prices for cocoa were raised in both Ghana and Côte d'Ivoire, this was nowhere near the levels of inflation. In October 2022, inflation rates in Ghana officially reached 37% when the fixed price for the new season was announced at 21% higher than the year before.

The sustainability lie

Many companies know their cocoa comes from farms that struggle to feed their family, to send their children to school, and to hire adult labourers instead of working with their own children on the plantations. Despite this knowledge, more and more companies claim that their products are sustainable. When criticised from NGOs for doing this, they often reply that the cocoa is certified by standard-setting organisations or by company projects.

According to the first globally agreed on definition of sustainability, this is pure greenwashing.

"Sustainable development is development that meets the needs of the present without compromising the ability of future generations to meet their own needs. It contains within it two key concepts: the concept of 'needs', in particular the essential needs of the world's poor, to which overriding priority should be given; and the idea of limitations imposed by the state of technology and social organization on the environment's ability to meet present and future needs." (Brundtland 1987)

Cocoa farming families usually cannot cover their essential needs. According to recent studies there's no big difference between families living on farms supported by projects or being certified and others.³⁶ Additionally, the deforestation in the cocoa sector reinforces the global climate crisis and this threatens the prospect of all future generations in the cocoa belt. To call cocoa coming from these regions sustainable completely ignores the situation of cocoa farmers and of the ecosystems.

36 See the summary of existing figures in (Le BASIC 2022: 66-69). The same study calculates what farmer receive for conventional and for certified cocoa sold on the German market. Differences are very small, see page 54-58.

Stable chocolate market

For chocolate and cocoa companies, the outlook is much less worrying. Chocolate sales have expanded steadily over decades, with only small disruptions for the global cocoa and chocolate industry. In most leading chocolate consuming nations, demand for chocolate is very stable. Although during lockdowns people couldn't shop as much, travelled less, and didn't go to restaurants and canteens as much, places where chocolate is often consumed or purchased. The turnover for the chocolate industry remained relatively stable, with a growth in 2020, and a slight decrease in 2021. It is expected that sales of chocolate will keep on rising in the future.

High profits

Most companies boasted high profits during the last two years. Even the Covid-19 crisis only had a limited impact. Both Olam and Cargill reported record profits in 2021. Mondelez, Hershey³⁷, and Barry Callebaut³⁸ all have reported strong profits in earnings call with investors in 2022, with Mondelez even claiming this was "driven by higher pricing".³⁹

It is, to put it simply, a very good time to be a chocolate company.

Chocolate consumption in Russia and Ukraine

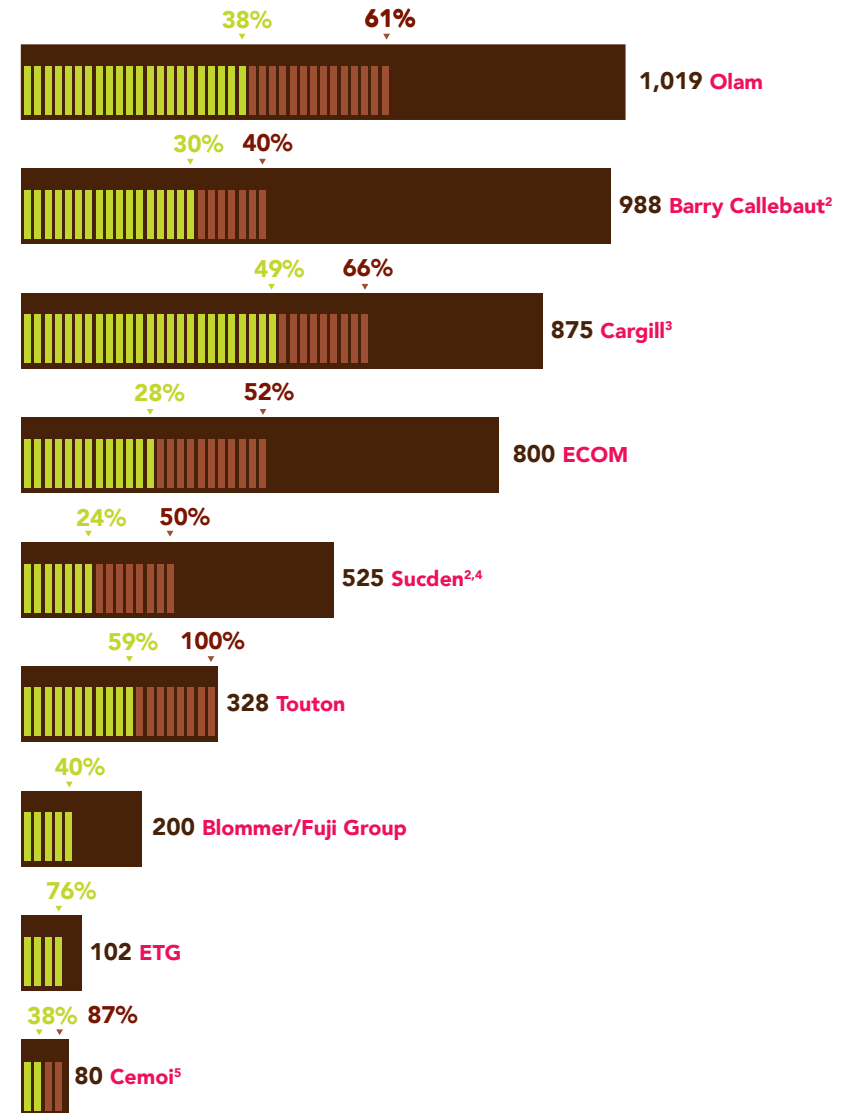
The attack of Russia on the Ukraine will lead to a decline in chocolate consumption. Factories in Ukraine are partly not working presently, Western companies reduced exports to Russia and the economic crisis in Russia due to sanctions and in the Ukraine due to war will lead to a decreased demand. Before the war, the two countries had a consumption of 200,000 tonnes of cocoa bean equivalents.

37 See <https://bartalks.net/hershey-half-year-results-profit-boosted-despite-inflation-worries/>

38 See https://www.barry-callebaut.com/sites/default/files/2022-04/PRR%20Barry%20Callebaut%20Group%20Half-Year%20Results%20Fiscal%20Year%202022_0.pdf

39 See <https://seekingalpha.com/article/4503813-mondelez-international-inc-mdlz-ceo-dirk-van-de-put-on-q1-2022-results-earnings-call>

Traders and Processors: Used Cocoa



Traceable to coop / to farm / used cocoa 2021⁽¹⁾

1) using ICCO conversion rates: Cocoa butter 1.33, Cocoa paste/liquor 1.25, Cocoa Powder and cocoa cake 1.18

2) fiscal year 2020/21

3) The Hershey Company stated they source between 200,000 - 240,000 tonnes per year, we took the middle of that range

4) estimates by the authors

5) 100% of the grinded beans are traceable to cooperative level and 45% of the grinded beans are traceable to farm level, but due to additional volumes needed to produce chocolate the percentage is reduced to respectively 87% and 38%

Traders and Grinders

Highly concentrated market

Volumes of the major trading, grinding, and processing companies have remained stable over the past years. Although tonnages do not add up to a total volume used – these companies partly trade with each other – 4.5 million metric tons of cocoa bean equivalents pass through the six biggest companies. Each of the largest four companies trade as much or even more cocoa than is grown in Ghana, the world's number two cocoa producer. With great power comes great responsibility⁴⁰. The enormous market concentration in the cocoa sector puts a burden of responsibility on the leading companies concerning human rights due diligence and the avoidance of deforestation in their value chains.

Traceability

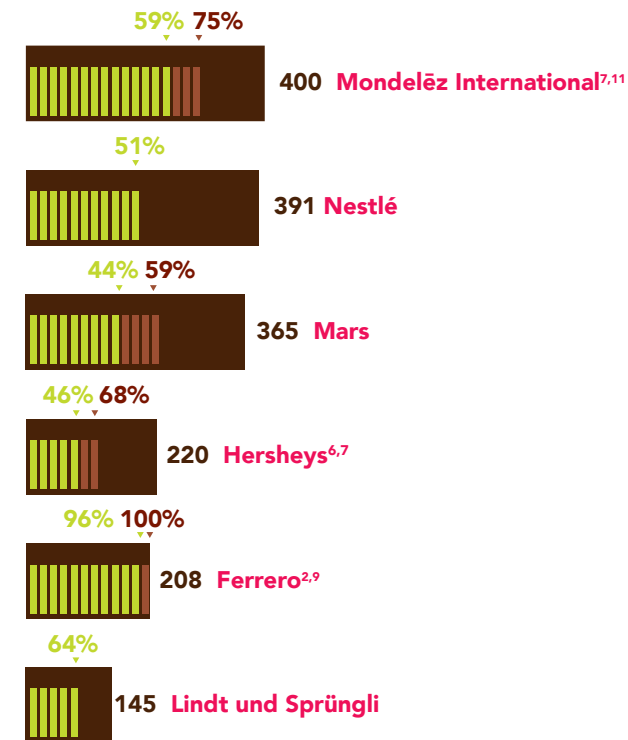
An important part of that responsibility is to ensure full traceability throughout the supply chain. At present, there are many ways that companies are approaching traceability. Some rely on the figures from standard-setting organisations and cooperatives. Others work with GPS localisation and polygon-mapping, which are much more reliable than the self-reporting of cooperatives and farmer groups. While traders and grinders have made progress concerning traceability, large differences can be observed. Traceability to cooperative level is lowest for Barry Callebaut and Blommer/Fuji Group, with 40%, and highest for Cemoi with 87%. Traceability to farm level also progressed, where the range goes from 24% for Sucden to 76% for Cocoman.

Creating traceability along the value chain down to farm level comes with a cost. Additionally, all stakeholders are aware that transparency will lead to follow-up costs; knowledge about the origin of the cocoa comes with knowledge about poverty, malnutrition, child labour, underpaid workers, other human rights violations, and deforestation.

Cocoa traders, grinders, and processors are in most cases not the producer of the final chocolate product. As such, they depend on chocolate brands and retailers to pay for these additional costs. However, this is not always the case. In fact, there are reports of pressure by downstream companies to reduce costs of sustainability programs, or for traders to co-invest in programs run by chocolate companies. In that light, it is relevant to mention that the relative margins for cocoa traders are small – they earn not insignificant profits because of the immense volumes that they trade in.

⁴⁰ This line, spoken by Uncle Ben to his nephew Peter Parker (Spiderman) is also called the "Peter Parker Principle".

Chocolate Brands: Used Cocoa 2021¹



Traceable to coop / to farm / used cocoa 2021⁽¹⁾

- (1) using ICCO conversion rates: Cocoa butter 1.33, Cocoa paste/liquor 1.25, Cocoa Powder and cocoa cake
 (2) fiscal year 2020/21
 (6) Hersheys reported to source 200,000 - 240,000 tonnes per year, we took the middle of that range
 (7) Estimates by the authors
 (8) only for Cote d'Ivoire and Ghana / only direct bean sourcing
 (9) both certification schemes like Rainforest Alliance and Fairtrade as well as cocoa supplier standards and programs such as Cocoa Horizon.
 (10) Since 2020 Hershey has upheld its commitment to Source independently verified cocoa (by volume) through: Fair Trade USA, Rainforest Alliance and verified supplier programs
 (11) Based on 78.5% farm polygon mapping in program supply chain covering 75% of cocoa

Though part of the reason why traceability is not universal yet is a lack of ambition and funding by the cocoa (and chocolate) sector – and a lack of legislation in consuming countries at present. Another part – at least in Côte d'Ivoire – is national legislation. By law, at least 20% of cocoa sourced by companies must be bought via local exporters. These local exporters cannot or do not want to provide the traceability needed, as they source through local middlemen such as pisteurs and traitants.

Traceability

The chocolate sector also remained mostly stable. There are two exceptions. Mars reduced its cocoa demand by nearly 10% and Ferrero grew strongly. Traceability to cooperative and to farm level increased significantly. Ferrero is the first major company which claims to have 100% of cocoa traceable to the cooperative or first buyer, while Nestlé says that for 51% of the cocoa used. Ferrero also claims to have the highest traceability to farm level with 96%, while Mars reports 44%. Ferrero additionally stresses that 88% of the farms in the value chain of the company are polygon mapped and 100% are certified. Traceability for chocolate brands is significantly higher than of big traders and grinders. All of them have targets to reach full traceability - if they haven't already reached it - to at least cooperative level. To achieve these goals, they concentrate procurement on sources that are more transparent than average.

Untraceable cocoa butter

However, these numbers are deceiving, and at least part of their sourcing remains untraceable: most companies buy cocoa butter of unknown origin. Some companies are working on this. Tony's Chocolonely has had traceable cocoa butter for several years now, and Lindt & Sprüngli has a target of 100% traceable butter by 2025.

Producer countries

Increased production

Global production volumes of cocoa have gone up by about 20% in the past ten years, from 4,1 million tonnes in 2011/12 to 4.9 in 2021/22. Despite tremendous industry investment, this increase in volume is not because of higher productivity per hectare, but because of the enlargement of planted areas. Many of the new plantations were erected in protected areas or even in natural reserves. According to the government of Côte d'Ivoire, 10% to 15% of the harvest comes from illegally planted areas, NGOs think that it might be more than 30%. Ghana also has a serious problem with plantations on illegally deforested land.

Côte d'Ivoire, and to a lesser extent Ghana, dominate the world's production. The sheer market power of these two countries with more than 60 % of global cocoa production sets the frame for the whole sector.

However, Ghana's production is starting to decline.⁴¹ At the same time, Latin American countries are increasing their production significantly. Ecuador, in fact, might even overtake Ghana as the world's second largest cocoa producer within the next ten to fifteen years.

Supply management

With volumes trending upwards globally and farm gate prices becoming an ever more important topic, it would stand to reason that a lively conversation would be taking place on supply management. However, despite chocolate and cocoa companies always pointing to supply and demand as being the main determinant for cocoa prices, the discussion on supply management policies is largely absent.

Though Côte d'Ivoire has implemented policies against increasing productivity since the price collapse of 2016/17, this does nothing to curb increases from newly developed cocoa farms. At the same time Ecuador and to a lesser extent Peru are strongly growing their cocoa sector, including bulk cacao CCN51, partly masquerading as fine flavour cacao.⁴²

The International Cocoa Organisation (ICCO) has been trying to get a working group of government and private sector exports together on supply management, but progress is painstakingly slow, largely due to inaction on the side of the Ghanaian government who chair the working group.

If the production of cocoa could be kept to a level just below the global demand for a long enough time, this could drive prices up at a global level. The benefits for farmers as well as for producing companies should be obvious to all. Conversely, if overproduction is not curbed, massive price crashes such as in 2016/17⁴³ will continue to happen, destabilising cocoa farming communities across the world.

⁴¹ This decline is the result of a triple threat of an outbreak of Cocoa Swollen Shoot Virus (CSSV), increasing pressure on cocoa by gold mining, as well as a cost-of-living crisis driving farmers out of high-cost high-risk low-remuneration agriculture.

⁴² Though Ecuadorian claim that 75% of their export is Fine Flavour Cacao, the reality is that as much as 70% of Ecuador's cocoa production nowadays consists of standard quality cocoa.

⁴³ Which was driven by an unexpected massive production increase in Côte d'Ivoire

Though supply management is not a silver bullet, it must be part of the toolkit of policy measures to increase sustainability in the cocoa sector.

Standards

The race for certified volumes in the past decade has not led to the bar being raised. Even though at least a third, perhaps even more than half, of all the global cocoa production is grown under a certification label or an own company sustainability label, major problems persist; chocolate companies and retailers tend to look for the cheapest label, neglecting the potential negative effects of this price pressure. If anything, the relevance of certification standards has been declining. For a long time, it seemed the only tool available to achieve sustainability was certification. With an increase in sector efforts, in data and research, and in experience with implementation, the sector now has a wider range of interventions at its disposal.

Certified is not the same as sustainable

Claiming sustainability off the back of a certification system is misleading. However, the terms “certified cocoa” and “sustainable cocoa” are still often – wrongly – used interchangeably. Certified cocoa cannot be claimed to be sustainable merely based on certification, whether this certification is Fairtrade, Rainforest, ISO/ARSO, organic, or any other standard.

Standards focussed on farmers, not the multinationals

Thinking that farming standards are the answer implies that bad farming is the problem. Whereas most standards do have a trader code of conduct, the focus has historically been on the farming standard. For chocolate companies to be able to sell a product as certified requires very little fundamental change in the way they operate. Certification has done very little to close the power gap between multinationals and farmers. If a farmer is required to change most of his/her business practices to be able to sell their product, why shouldn't the same be asked from large multinational corporations?

Benefits of certification

There are several ways in which certification plays an important role to make value chains more transparent; it is, at the moment, one of the few ways by which higher prices and premiums can potentially be delivered to the farm gate, it offers support to farmer organisations through financing and enabling cooperatives, and this backbone provides a framework by which many other necessary interventions – such as Child Labour Monitoring and Remediation Systems (CLMRSs) and village savings and

loans associations (VSLAs) – can be rolled out. However, it remains an open question whether certification is the most efficient tool on these issues for it to be part of the solution.

Advocacy

Both Fairtrade and Rainforest Alliance engage the cocoa sector in advocacy efforts that go beyond the direct interest of promoting their own standards. This is a necessary and welcome acknowledgement that Voluntary Sustainability Standards (VSS) are only part of the solution and that farm standards operate in a broader social context. In that light, it is good that both standards are strongly advocating the need for regulation and broader landscape approaches. At the same time, standards engaging in advocacy also creates complexities around the business interests of the VSSs, as a large part of their earnings still is based on tonnages sold.

Competition with sustainability programmes of chocolate companies

Both standard organizations are in direct competition with the sustainability programmes of some cocoa and chocolate companies. Some of the companies have introduced their own seals, such as Mondelez the Cocoa Life seal or Nestlé the Nestlé Cocoa Plan. Both Fairtrade and the Rainforest Alliance fear that large licensees will opt for their in-house sustainability programmes and abandon the original standards. The companies' own programmes are much less transparent than Fairtrade and Rainforest Alliance, potentially leading to a race to the bottom. Impact studies are only partially published, and many companies have not even published their standard. Furthermore, the democratic consultation processes that are in place in particularly Fairtrade and Rainforest Alliance are absent in in-house sustainability programmes, that have a much more top-down hierarchy. All standards must be third-party verified to be credible

Summary

Though the world is going through economically difficult times, chocolate and cocoa companies are not merely stable, they are thriving. For farmers, however, times are desperate, with cost of living and cost of production skyrocketing while the price they receive for their cocoa is relatively stable.

Companies

At trader/grinder level, the sector remains extremely concentrated. The enormous market concentration in the cocoa sector puts a burden of responsibility on the leading companies. An important part of that responsibility is to ensure full traceability throughout the supply chain. The levels of traceability vary strongly between companies, but all have a significant portion of indirect - and therefore untraceable - sourcing. At chocolate company level, traceability seems to be higher, but this is because they concentrate their procurement on sources that are more transparent, thereby leaving the untraceable cocoa to other market actors.

Supply management

Globally, production of cocoa continues to increase, primarily driven by growth in Côte d'Ivoire and Latin America. Despite chocolate and cocoa companies always pointing to supply and demand as being the main determinant for cocoa prices, the discussion on supply management policies is largely absent. Though it is not a silver bullet, supply management must be part of the toolkit of policy measures to increase sustainability in the cocoa sector.

Standards

The race for certified volumes in the past decade has not led to the bar being raised. Even though at least a third, perhaps even more than half, of all the global cocoa production is grown under a certification label or an own company sustainability label, major problems persist; chocolate companies and retailers tend to look for the cheapest label, neglecting the potential negative effects of this price pressure. Claiming sustainability off the back of a certification system is misleading. However, the terms "certified cocoa" and "sustainable cocoa" are still often - wrongly - used interchangeably. Certified cocoa cannot be claimed to be sustainable merely based on certification.

7. Enabling Environment



Enabling Environment

Legislative environment in Consuming Countries

Public concern over the impacts of the production of cocoa on human rights and the environment has been growing since at least the turn of the millennium. On top of the well-known association of cocoa production with child labour, this concern has been sparked in recent years by the growing awareness of the impact of agriculture on the climate. World-wide, the main driver of deforestation – with accompanying impacts on greenhouse gas emissions – is clearance for agriculture. While other ‘forest risk commodities’, such as cattle, palm oil, soy and timber are larger contributors to global deforestation, cocoa is an important driver of forest clearance in West Africa.

In response, consumer countries, particularly the EU and UK, are developing policy measures to break the link between supply chains and issues such as child labour and deforestation. Mainly, this aims to place requirements on industry – the companies sourcing cocoa and placing cocoa products on the market – to improve transparency and ensure their supply chains are free of cocoa produced with negative impacts on human rights and/or the environment. This development is part of a broader policy debate – at national, EU and UN level, and cutting across all sector – on how to ensure responsible business conduct, in line with human rights and sustainability agendas.

Central in this policy debate is the introduction of mandatory ‘due diligence’ obligations for companies. In 2011, the UN Guiding Principles on Business and Human Rights confirmed companies have a responsibility to respect human rights. In order to meet that responsibility, companies should put in place a continuous due diligence process to identify, prevent, mitigate, and remediate their negative impacts on human rights. Initially, the emphasis of policy makers was on encouraging company self-regulation, but it was increasingly clear that corporations had made little substantive changes in their practices. In response, there is an increasing trend towards disclosure and transparency laws as well as mandatory human rights (and environmental) due diligence. Recently, company support for legislation and company implementation of human rights and environmental due diligence has also been on the rise in a number of business sectors, including in particular financial services and food production and processing. It is also now increasingly being applied by businesses to identify, prevent, and mitigate the risks of negative impacts on the environment, human rights, and social and labour standards.

To date, existing or draft legislation on sustainability requirements with regard to human rights abuses and/or environmental harm has largely taken one of two approaches:

- A requirement for companies to implement a due diligence process that covers potential negative impact on human rights, labour rights, or the environment – ideally based on the UN Guiding Principles and the OECD Due Diligence Guidance – applying to an enterprise’s entire operations and value chains, not specific to any sector or product, and not a requirement of placing products on the market.
- A product-based requirement, either on a specific issue (such as conflict minerals, deforestation, or child labour) or a specific commodity (such as the EU Timber regulation), for certain activities to (not) be undertaken before specified products can be placed on the market, imported, or exported.

Some examples of each type of legislation are listed below; several other countries are also considering introducing similar legislation.

General corporate obligation of due diligence

This approach to due diligence in legislation covers a range of social and sometimes environmental criteria; it is often called ‘human rights due diligence’ or ‘human rights and environmental due diligence’. It follows closely the concept of due diligence articulated in the UN Guiding Principles on Business and Human Rights and various OECD guidance documents. It is applied across an enterprise’s entire operations and supply chains.

The UN Guiding Principles on Business and Human Rights (UNGPs)

The UN Guiding Principles on Business and Human Rights (UN Guiding Principles) are a set of guidelines for governments and companies to prevent, address and remedy the risk of adverse impacts on human rights abuses linked to business activity. They were endorsed by the UN Human Rights Council in June 2011. The UN Guiding Principles outline key three principles that should guide all considerations around human rights in value chains. These three principles are

- 1. The state duty to protect human rights.*
- 2. The corporate responsibility to respect human rights (even if states have not protected human rights, as stipulated in the first principle)*
- 3. Access to remedy for victims of business-related abuses*

The UN Guiding Principles further explain in detail what is expected of

states and corporations to live up to their duties and responsibility, and various OECD Guidance documents have further elaborated that as well.

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France

In March 2017 France adopted the corporate *Devoir de vigilance des sociétés mères et des entreprises donneuses d'ordre* (Due diligence of corporations and main contractors) law applying to companies incorporated under French law with more than 5,000 employees in France or 10,000 world-wide. Companies subject to the legislation (in 2021 there were 263 companies identified by the French coalition of NGOs, FCRSE⁴⁴) must implement and publish a 'vigilance plan' explaining how they are exercising due diligence in seeking to identify and avoid human rights violations, breaches of fundamental freedoms, violations of health and safety rights and environmental damage. This includes the identification of risks, procedures for regular assessments of the parent company and its subsidiaries, as well as sub-contractors and suppliers with which there is an established business relationship, actions to mitigate risks or prevent serious harm, and mechanisms for alerts and monitoring. The companies must also publish annual reports on progress. The state plays no role in verifying compliance, but civil liability mechanisms can be pursued by third parties in case of an enterprise's failure to implement the plan or if there are weaknesses in it.

Netherlands

The Child Labour Due Diligence law, adopted in May 2019, obliges companies to investigate whether their goods or services have been produced using child labour and to devise a plan to prevent child labour in their supply chains if they find it; they must submit a statement to the authorities declaring that they have investigated risks of child labour in their activities and supply chains. It applies to all companies that sell or supply goods or services to Dutch consumers, no matter where the company is based or registered, with no exemptions for legal form or size. The law was anticipated to enter into force in 2022, but in December 2021, the government announced plans to replace it with a broader requirement for mandatory due diligence, as specified in OECD Guidelines, covering all impacts listed there and including a remediation obligation if prevention fails. This was partly designed to put pressure on the European Commission to publish its own proposals (see below). In the meantime, in

44 See <https://plan-vigilance.org/wp-content/uploads/2021/07/2021-07-05-Radar-DDV-Rapport-2021.pdf>

November 2022, a coalition of parties submitted a parallel Due Diligence law to Parliament in line with the OECD Guidance and UNGPs – although it sadly is lacking reference to living income, living wage, and purchasing practices. The Dutch Cabinet was also developing a draft legislative proposal but have put this on hold to discuss the parliamentary proposal.

Germany

The Supply Chain Due Diligence Act was approved in 2021 and will enter into force in 2023. The obligation will apply to companies with more than 3,000 employees, falling to 1,000 from 2024; this will ultimately cover about 4,800 companies. But many companies are already demanding information from suppliers about rights risks and the value chain, so that the law covers much more companies.

The law obliges these companies to fulfil their due diligence obligations in their supply chains – including their direct suppliers – with regard to respecting internationally recognised human rights and environmental harm which affects human rights. The law specifies a series of steps which the due diligence obligation requires, including establishing a risk management system, performing regular risk analyses, establishing a complaints procedure, taking remedial action, and documenting and reporting. If the risk analysis leads to a “substantiate knowledge” about potential risks further down the value chain, it has to tackle his risks. Affected parties have the right to assert to the authorities that their rights are being violated or directly threatened by a company's failure to comply with its due diligence obligations; in this case, the authorities must take action to investigate whether a breach has occurred and work towards its elimination by the company.

European Union

In February 2022, the European Commission published a proposal for a Corporate Sustainability Due Diligence Directive (CSDDD). This is intended to place an obligation of due diligence on large companies registered or operating in the EU with regard to human rights abuses and environmental harms in their operations and value chain. The company size threshold is lower for enterprises operating in 'high-impact' sectors, which include agriculture / forestry / fishing / food, textiles, and minerals. SMEs are exempted from direct obligations, but many will fall into the category of entities with established business relationships with larger companies. The criteria on which the due diligence obligations are proposed to be based are defined with reference to a wide range of UN human rights instruments, ILO conventions and multilateral environmental

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agreements; both child labour and deforestation are included explicitly in the annex on human rights obligations.

The proposed due diligence procedure is defined in six steps. Companies are to: integrate due diligence into their corporate policies and have a due diligence system in place; identify actual or potential adverse impacts; prevent potential adverse impacts where possible, and mitigate actual impacts where not; bring actual adverse impacts to an end where possible and minimise their extent where not; establish and maintain complaints procedures; monitor the effectiveness of their due diligence policies and measures; and publicly report on their due diligence efforts. As a directive, once the legislation has been agreed through the EU's legislative procedures (which may result in changes in the elements outlined above), it will need to be implemented through national legislation in all 27 EU member states.

The current draft of the regulation has several critical shortcomings. First of these, is that it does not require companies to ensure their farmers can earn a living income. It is insufficiently aligned with international standards set out in the UN Guiding Principles on Business and Human Rights (UNGPs) and the OECD Due Diligence Guidance for Responsible Business Conduct. The restriction of the due diligence obligation to 'established business relationships' should either be removed or reworded to make it clear that companies are obliged to conduct due diligence across their entire supply chain. Special efforts should be made to engage with particularly vulnerable groups, including smallholders and indigenous peoples and local communities, and engagement strategies should be gender sensitive, a key element that is currently missing in the proposal.

Market-related regulations

There are also regulations based on specific issues or products, requiring companies that place specific products on the market to undertake a variety of sustainability activities. Generally, the legislation also includes a prohibition on placing products that do not meet the criteria on the market. Several examples now exist covering timber and wood products, including the EU Timber Regulation (EUTR), where the underlying criteria are the legality of production under relevant legislation in force in the country of origin.

European Union

In November 2021, the European Commission published a proposal for a Regulation on Deforestation. (At the time of writing, the regulation is still to be debated by the EU's legislative process, and some of the elements

outlined below may change.) Building on the EU Timber Regulation, the proposed regulation contains the following main components:

- A prohibition on first placing or making available specified commodities and products on the EU market or exporting them from the EU unless they are free of deforestation and forest degradation after 2020 and have been produced in accordance with the relevant legislation of the country of production.
- An obligation on companies placing products on the market or exporting them to exercise due diligence to ensure their compliance with these criteria.
- A 'benchmarking system' to assess the level of risk that products from particular producer countries, or parts of them, may not be in compliance with those criteria.

The commodities and products to be covered are beef, cocoa, coffee, palm oil, soy, and wood; this includes several semi-processed and processed derivatives, such as chocolate and leather. The regulation supersedes the EUTR, so includes all the timber products listed there.

The due diligence procedure described in the proposed regulation includes three steps: a process for collecting information about the products (including the geographic coordinates of the plots of land on which they have been grown), and evidence that the products are free of deforestation and forest degradation and have been produced legally; a risk assessment step, to determine the level of risk associated with the products; and a risk mitigation step if the company cannot be sure that there is no risk, or a negligible risk, that the products are not compliant.

Companies are obliged to submit a 'due diligence statement' before the products are placed on the market or exported, stating that the products meet the criteria, or at least that there is a negligible risk of them not doing so. The statement must contain information about the products (including the geolocation coordinates of the plots of land of production) and confirms that due diligence was carried out and that no or only negligible risk was found. These statements will be entered in a register which will be available to enforcement agencies in EU member states and, in an anonymised form, to the public.

United Kingdom

The Environment Act, approved in November 2021, makes it illegal for large businesses operating in the UK (above a turnover threshold, yet to be specified) to use key commodities associated with deforestation produced on land illegally occupied or used. The companies will also be required to undertake due diligence on their supply chains to assess and mitigate the risk that relevant local laws pertaining to land use and land ownership have not been complied with, and to report on this exercise annually.

The government has identified cattle (beef and leather), cocoa, coffee, maize, palm oil, rubber, and soy as potential commodities to be covered (timber is covered separately in the UK Timber Regulation) and in early 2022 consulted on which of them should have priority in a phased implementation, along with other features of the legislation. Secondary legislation will be published in due course.

Switzerland

Though a progressive legislative proposal on due diligence was accepted by the majority of the Swiss population in a referendum, the majority of the cantons rejected the initiative. As such, the comprehensive due diligence obligation wasn't adopted. In its place, there are now reporting requirements and partial due diligence obligations on child labour and conflict minerals only.

United States

Regulatory developments in the United States are lagging behind on Europe. The Forest Act -largely in line with the EU Deforestation Regulation described above - will most likely not be passed through Congress. The White House, however, has stated they want to move forward on a deforestation plan, and the US State Department in October of 2022 put out a request for information to interested parties to provide input as to what a US deforestation and due diligence regulation should look like.

Legislative environment and strengthened institutions in producing countries

Legislative gaps

In producing nations, there are the gaps in legislation that still need to be filled or improved upon. A lack of land and tree tenure security undermines the ability of farmers to actively engage in environmental protection efforts. Other gaps exist on gender equality, governance of cooperatives, and government transparency on the LID.

Lack of enforcement

There are also challenges enforcing legislation that is already in place. Existing land use and environmental laws should be enforced much more consistently. The enforcement of nationally approved chemical lists could greatly reduce the widespread use of Highly Hazardous Pesticides. National child protection laws are often only partly or haphazardly enforced.

Complaint and redress mechanisms

Accessible and effective complaint and redress mechanisms are also largely absent in West African producer countries, both on environmental and human rights abuses. These are necessary for rightsholders, as well as NGOs, journalists, and investigators to hold power accountable, whether it is corporate or government.

National traceability systems

The development and implementation of national traceability systems to combat deforestation are essential. It is a positive development that in Ghana, civil society has been consulted in the process of developing the national Cocoa Management System. However, both West African countries are still to properly roll out these systems.

Effect of regulations from the Global North

Upcoming regulations in the Global North will affect the way cocoa can be brought to market. Their final text as well as their implementation and enforcement will determine whether they are effective. Traceability to farm level, ensuring the right definitions are used so there are no loopholes, and ensuring that all companies are required to be compliant are all key issues that are still at stake. What will also be key is the question of who will pay. It is going to be essential to ensure that smallholder farmers are support to comply to regulation, and that these necessary legislative developments do not cause an extra burden for farming communities that are already struggling.

Strengthened institutions

Existing institutions must be strengthened, both at a governmental level, as well as in local communities. This strengthening can be in the form of capacity building and professionalisation, but sometimes also is as straightforward as fighting corruption and inefficiencies. In producing countries, there are no multistakeholder platforms such as the ISCOs in Global North to collectively and inclusively set agendas and work towards achieving sustainable cocoa sectors in origin countries. At farming community level, Village Savings and Loans Associations (VSLAs) should be universally rolled out, and farming communities should also be strengthened in understanding their legal rights, both vis a vis buying companies as well as the government and local rulers.

Cooperatives

Almost all efforts in cocoa reach only farmers that are already (loosely) organised in cooperatives. Most cocoa farmers, however, are not organised, and are not being reached. Concerted strategies must be developed to reach these 'higher hanging' fruits, and to help them get organised.

Challenges

Strong autonomous farmer organizations should become the bedrock of the sector. This will require strengthening the role, functioning, quality, and structure of cooperatives. At present, there is a wide range of cooperatives, from large to small, and from cooperatives created by the government to ones that have developed organically. For some cooperatives, internal governance is weak, leading to a variety of challenges, including inefficiencies, corruption, and a lack of transparency. Moreover, it means that many cooperatives are not able to act as advocates for their members in policy-making processes. In some cases, cooperative structures may be mis-used as fronts by local traders – or, in Côte d'Ivoire, by big landowners – to gain access to money or training.

Gender equality

Cooperatives often do not sufficiently represent women farmers, as their members are usually predominantly male. The low levels of female members in turn allows the cooperatives to gear their actions (representation, service provision, advocacy) more to male farmers' needs. Barriers that prevent female farmers from becoming members include high membership fees and strict requirements of land or tree ownership.

Governance

For cooperatives to play the positive role that they could play, they must be farmer-led, professionally run, financially independent and accountable to their members. A first step to achieve that is for cooperatives to ensure that they are democratic bodies which genuinely represent both their male and female farmer members.

There's also an important role for governments and exporters to play here. The small margins and - consequently - large volumes cooperatives are pressed to generate often don't allow bottom-up cooperative structures to grow. Rather, the model works for financially strong middlemen.

Cooperatives should be supported in such a way that they can participate effectively in multi-stakeholder policy processes. This is a process that will take time, resources, and potentially a review of the laws governing cooperatives.

Inclusive Deliberative Approaches

So far, strategies in the cocoa sector have been developed top-down, often based on analysis and needs of the chocolate industry or aimed at production targets set by governments. Local stakeholders and the affected people themselves have at best been marginally involved. Strategies for an enabling environment must be developed and defined collaboratively at a national or sometimes even local level, with local ownership helping to ensure actions are fully integrated into socio-political and economic contexts.

Deliberative Approach (involve.org.uk 2018)

- *Deliberation is an approach to decision-making that allows participants to consider relevant information from multiple points of view. Deliberation enables participants to discuss the issues and options and to develop their thinking together before coming to a view, taking into account the values that inform people's opinions.*
 - *Deliberative dialogue builds on dialogue and consensus building techniques, enabling participants to work together (often with expert input) to develop an agreed view or set of recommendations.*
 - *Deliberative decision-making builds on partnership methodologies to enable participants and decision-makers to decide jointly on priorities and programmes. Examples include partnership bodies and participatory budgeting exercises where power is genuinely devolved to participants.*
-

Although based on a set of minimum threshold criteria that should apply globally⁴⁵ these strategies should be developed through an inclusive and deliberative approach, bringing in not just industry and governments, but ensuring civil society and local community representatives have a seat at the table. Such an approach goes beyond mere “consultation”, to be a genuine discussion where stakeholders can respect, argue, build trust, decide, and collaborate. This would give local civil society organisations and farmers’ representatives a real seat at the table, addressing their disenfranchisement, and countering the lack of accountability and transparency that allows politicians, companies, and others to act with impunity. Changing such deep structural issues takes time, and the process should proceed with a long-term view in mind. Speed should not be pursued at the expense of getting things right.

It is especially important that women are not (inadvertently) blocked from taking part - barriers to participation need to be accounted for. For example, land ownership or entitlement should not be a requirement for women to participate. Other factors such as literacy, education levels and gender-based violence should be identified and accounted for.

Collaborative development of landscape approaches

Many sustainability initiatives are currently limited to cocoa-plot scale. However, a landscape level perspective is needed necessary that places interventions in the wider context of rural development, poverty alleviation, human rights, and environmental sustainability, as well as climate mitigation and adaptation strategies. A landscape approach also integrates the interests for a variety of commodities and stakeholders. These landscape approaches should be locally owned and locally led, with international actors - such as donors and multinationals - in a supporting role, not a leading one.

45 Including but not limited to the International Bill of Human Rights (consisting of the International Declaration of Human Rights; the International Covenant on Economic, Social and Cultural Rights and the International Covenant on Civil and Political Rights), the ILO Core Conventions, the UN Guiding Principles on Business and Human Rights and the OECD Guidance for Responsible Agriculture Supply Chains.

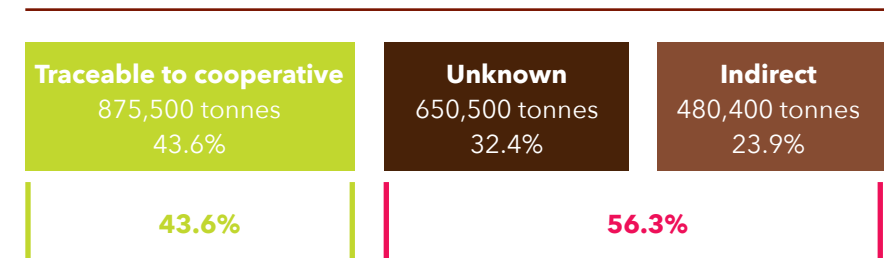
Transparency & Accountability⁴⁶

Transparency and accountability (T&A) are essential to make sustainability efforts both credible and effective. They also provide a level playing field for all supply chain actors, enable improved market access, and help increase farmer income.

A first key step towards transparency & accountability is the setting up of credible national traceability systems that inform risk assessment and mitigation. And though both Côte d’Ivoire and Ghana are developing these, the process is taking very long. Once these systems are in place, companies will have to start publicly disclosing key findings, corroborated by independent observers. In that light, the recent announcement by ECA and Caobisco - the major European cocoa and chocolate umbrella organisations - to be actively working with the Ivorian and Ghanaian traceability systems is a very positive development. For these kind of transparency systems to work properly, common definitions and methodologies will need to be agreed on.

Most of the discourse around traceability currently focusses on geographical data and environmental concerns. However, for true accountability to be possible, these polygons need to be coupled to a variety of socioeconomic statistics, such as household composition, income, farm gate prices paid, child labour data, etc.

Figure X: Traceability of cocoa from Cote d’Ivoire



The black box: half of the cocoa traded without knowledge of origin

Despite all the progress made during the last years, still roughly half of the cocoa sourced by the big traders and grinders is not traceable. This means that cocoa produced on illegally deforested areas or bought from farmers that aren’t covered by programs to improve the situation of the families and reduce child labour finds a market.

46 A deeper dive on Transparency & Accountability can be found in the Consultation Paper released by the Barometer Consortium in October 2022, that can be found here.

This causes a downward price pressure on the whole market and penalises companies who invest in projects to improve the situation of farmers. Companies willing to pay higher prices compete on a price driven market for standard chocolate and risk losing market share.

Definitions

- **Transparency** is the disclosure of information necessary to know what is happening in the supply chain. Transparency has an outward-looking dimension of demonstrating performance and building trust. The Accountability Framework Initiative (AFI, 2019) provides unified guidance to companies on reporting and disclosure practices to increase the credibility of their claims. This includes guidance on sources of information that are most relevant to supply chain transparency, but also on methods and definitions that underpin data collection and its interpretation, including supply chain traceability and geographical information on sourcing. Supply chain transparency is not about making all data available to everyone, nor about widely disclosing competitive or proprietary information. Data sharing can take various forms adapted and accessible to the relevant actors, especially to those that are 'credibility influencers', such as trusted independent monitoring organisations.
 - **Accountability** means being responsible for what you do. Supply chain accountability goes beyond transparency and includes other mechanisms - such as verification, audit, complaints mechanisms - that demonstrate a willingness to make oneself ready to answer for one's acts. This can include the recognition of errors and unforeseen negative consequences and actions to rectify them.
 - **Traceability** commonly refers to the ability to track the origin, production, processing history and distribution of a product. Traceability plays a key role in supply chain management. Traceability information usually remains in the ownership of supply chain actors that generate it, unless required by law, commercial agreements or voluntarily disclosed.
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Summary

Legislation in consuming countries

Consumer countries, particularly the EU and UK, are introducing "due diligence" legislation to try to break the link between cocoa production and child labour and deforestation, either at generic level, or with specific topics in mind such as on deforestation or child labour. The EU has developed regulations on both deforestation as well as a broader Due Diligence regulation. Many other European countries are also in the process of setting up legal frameworks.

Legislation and institution in producing countries

In producing countries, there are two legal challenges; the gaps in legislation that still need to be filled or improved upon, and the challenges of enforcing legislation that is already in place. Additionally, institutions need to be strengthened or implemented.

Cooperatives

Almost all efforts in cocoa reach only farmers that are already organised in cooperatives. Most cocoa farmers, however, are not organised, and are not being reached. Strong autonomous farmer organizations should become the bedrock of the sector. For cooperatives to play the positive role that they could play, they must be farmer-led, professionally run, gender-equal, and accountable to their members.

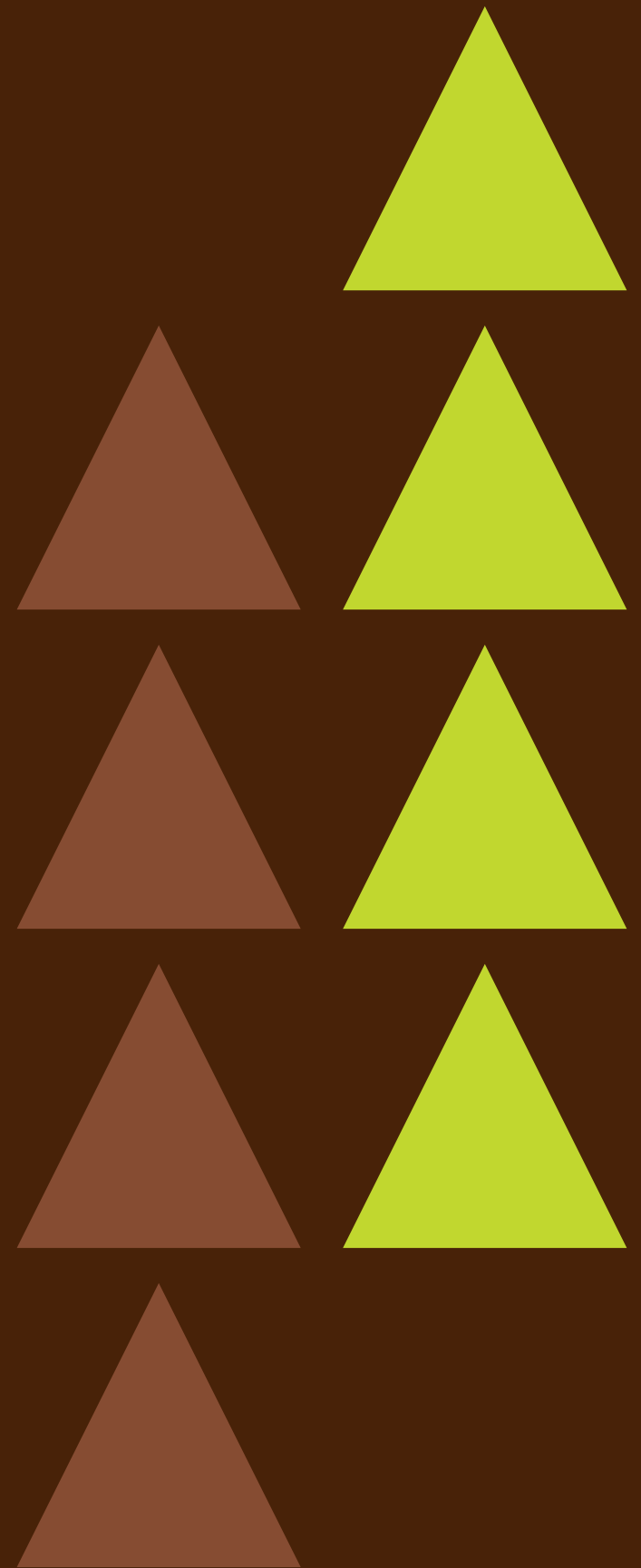
Deliberative inclusion

So far, strategies in the cocoa sector have been developed top-down, often based on analysis and needs of the chocolate industry or aimed at production targets set by governments. Strategies for an enabling environment must be developed and defined collaboratively at a national or sometimes even local level.

Transparency and accountability

Transparency and accountability are essential to make sustainability efforts both credible and effective. They also provide a level playing field for all supply chain actors, enable improved market access, and help increase farmer income. A first key step towards transparency & accountability is the setting up of credible national traceability systems. Beyond covering geolocation data, these systems need to be coupled to a variety of socioeconomic statistics, such as household composition, income, farm gate prices paid, child labour data, etc.

8 The Path to Living Income in Cocoa



The Path to Living Income in Cocoa

For living income to become a reality for cocoa farmers, action is necessary on three separate dimensions at the same time: good agricultural practices, good governance policies, and good purchasing practices. Any corporate or government effort that does not move significantly on all three dimensions at the same time will not be an adequate response to the challenge.

What is essential to stress here, is that living income will not be reached by project-based approaches. Achieving a living income will require a systemic approach, a systemic change.

Good Agricultural Practices

Focussing on Good Agricultural Practices (GAP) has been the strategy that has seen by far the most attention over the past two decades. For GAP to be part of a path to living income in cocoa, there are still key issues to be improved

Net income increase and risk reduction

Concepts for GAP should include calculations of changes of the net income of farmers, and an analysis of the true costs (social and ecological) of the changes. These should include robust calculations on the impact of the expected productivity increases, including transparency on increased production costs, both for labour and resources.

The element of risk needs to be part of the economic analyses besides the impact on net income. The prospect of a much higher net income coupled with extreme dependence on highly volatile variables is the right way forward. If we look at systemic change, we also need to look at the right indicators for this change.

Strengthened farmer capacity

When GAP is part of the sustainability strategy, farmer capacity must be strengthened. Each cocoa farmer should be supported to implement an individual farm development plan (FDP), based on local specifics such as soil types, elevation, local climate, and shade crops, rather than on generic approaches and generic inputs. The concept of GAP should move beyond technical trainings to include access to professionalized labour services and quality farm inputs in order to increase adoption of GAP among cocoa farmers.



All farmers should receive training in financial literacy and entrepreneurship, have access to loans and credit institutions, affordable credit, and recommended inputs, so that they can invest in and develop their farms. Financial inclusion mechanisms need to be developed specifically for smallholders, and for youth and female headed households.

Agrochemicals and monoculture

GAP trainings should move away from a focus on monoculture and heavy agrochemical use towards Integrated Pest and Soil Management (IPM) systems, where a shift from monoculture towards diversified production is necessary, particularly towards diverse agroforestry systems.

Equality

There is an increasing focus on better-off farmers, ignoring the plight of the lower income farmers. However, these have as much right to a living income as any other. A top-down approach is adopted and there are few farmer voices heard in this conversation, while gender equality is largely side-lined in this conversation.

Good Governance Policies

Good governance is as important as good agricultural practices.

Governance provides the enabling environment within which a living income can be achieved. All the items in this category require government action of some sort. Many – if not most – also require corporate action. In fact, the UN Guiding Principles on Business and Human Rights explicitly state that even if governments do not fulfil their duty to protect human rights this does not provide corporations an excuse to not fulfil their obligations to respect human rights.

Supply management

It is a matter of high urgency that cocoa producing countries start acknowledging that supply management solutions are part and parcel of any successful living income policy. Instruments can range from the extremes of buffer stocks and national production quotas – such as implemented in the cocoa sector for much of the 1970s and 1980s – through to more subtle tools such as rural development policies or land reform. Even an announcement by the Ghanaian government that they will no longer pursue a production target of 1.5 million tons would be a step forward. As a global issue, governments should align on common strategies to ensure transparent policies that put farmers first. These strategies should be firmly embedded in national rural and agricultural development strategies in cocoa producing countries that focus on both food sovereignty as well as on rural infrastructure⁴⁷.

Improved global LID

Governments of cocoa producing countries should cooperate and work towards a LID-like system in all producing countries, and work towards linking the price of cocoa to the cost of production plus a living income margin. This needs to be coupled with significantly increased transparency and accountability of how public funds – including the LID – are collected and directed to support a transformation in the cocoa sector. Supply chain transparency is also an essential part of this.

Living income in regulations

Governments in consuming nations need to make living income a key part of any Human Rights and Environmental Due Diligence regulation, requiring time-bound action plans by corporations. Additionally,

47 Despite being agricultural powerhouses, both Côte d'Ivoire and Ghana are net food importers. A just transition towards food sovereign agriculture is necessary. Cash crops, such as cocoa can play a major role in enabling this transition.

speculation on the terminal markets should be regulated to limit the role of hedge funds and financial speculation.

Global funding

Governments in consuming countries, international organisations, and donors need to make available significant funds to tackle farmer poverty. Additionally, impact assessments are needed which prove that the money is used for poverty reduction and not to increase productivity only, so that only industry profits from low prices.

Representation and voice

The capacity of farming communities should be supported and enabled to self-organise to have a bigger voice in political dialogues at the highest levels of decision-making.

Competition law

Governments in consuming countries should review existing competition laws where these are hindering the ability to agree on collective actions in order to tackle farmer poverty (and other sustainability challenges.)

Rule of law

Governments in producing countries and multinationals should adhere to existing regulations and standards in the cocoa supply chain.

Good Purchasing Practices

The least developed of the three dimensions described here are Good Purchasing Practices. Although they also deal with the farm gate price⁴⁸ paid to farmers, purchasing practices range much wider.

Short term

Many of the holistic interventions that this Barometer calls for are long-term processes that will lead to change over time. However, (extreme) poverty is a daily reality for the vast majority of cocoa farmers. They cannot afford to wait until long-term processes – such as diversified income, higher productivity, or a better rural infrastructure – have come to pass.

48 The European Commission recently released a report where increasing cocoa farm-gate prices is mentioned as the first among the key solutions to reduce poverty among cocoa farmers. A decent and acceptable price is also mentioned as a “necessary but not a sufficient condition to address child labour”.

Individual company action

Most Good Purchasing Practices do not require collective action, nor do they require a long development process; they can be implemented on a relatively short term, by individual corporate actors. For example, the Tony Open Chain and Colruyt Living Income Intervention are showing how good purchasing practices in the cocoa sector can lead to better prices for cocoa farmers.

Risk and reward

There are two key objectives of Good Purchasing Practices. The first is to attempt to redress the unequal distribution of risks, where at present farmers bear virtually all the risks. The second is to redress the unequal distribution of rewards, of which at present farmers receive far too little.

Time bound action plans

Every company should develop a time-bound living income action plan that includes purchasing practices – explicitly addressing farm gate pricing, including a living income minimum price. Methods need to be developed to ensure that extra price payments are redistributed throughout the community, so they can help the most vulnerable, such as women.

Long term, asymmetric contracts

Companies generally know how much cocoa they will need on a year-to-year basis. In order to reduce the risk for farmers, buying companies should engage in long-term relationships and contracts with their suppliers, defining specifically that companies will commit to volumes at specific price points for several years, and outlining the rights of the farmer/cooperative, so that sellers are less at risk from season to season. This also would open the possibility of spreading payment throughout the year, creating a healthier cashflow situation for households.

Procurement

Too often, sustainability and procurement are seen as two separate divisions of a company, leading to the dichotomy of farmers being engaged in poverty alleviation programmes, whilst the company procurement divisions are aggressively downwardly negotiating the price they are paying. The internal incentives for purchasing departments need to be carefully looked at.

Regulation

It must be mandatory for all companies to ensure they are not undercutting the farmers, that they have put in place time bound living

income strategies that include purchasing practices, living income reference prices, and asymmetric contracts. Time and again, company representatives argue that the reason they are putting pressure on prices is because it is legal. As such, any credible due diligence regulation must include requirements to achieve a living income.

Beyond procurement practices

Beyond procurement practices, companies need to critically review business functions and resource streams such as shareholder payouts, stock buybacks, tax avoidance/evasion practices, and marketing expenditures. As long as a significant part of their suppliers are living well below a living income, any such individual enrichment practices are entirely immoral.

Purchasing and Governance first

All three dimensions – Good Agricultural Practices, Good Governance Policies, and Good Purchasing Practices – are needed to address the challenge of living income effectively. However, not all three dimensions have an equal status. Good Agricultural Practices are only a worthwhile strategy if cocoa is sufficiently remunerative.

Historically, increases in scale and gains in efficiency have not led to better livelihoods for farmers, although they tend to benefit supply chain actors further downstream. Better agricultural practices might be making it easier to feed the world, they are not helping to better feed the farmer. Without a change in the power structures first, GAP will lead to higher profits for downstream stakeholders, not for farmers.

As such, the first step that needs to be taken to tackle the challenge of living income is for corporations to start taking major steps forward on the Good Purchasing Practices. In a similar manner, we need governments (and corporations) making serious work on Good Governance Policies.

Only when both the responsibilities of corporations and governments are properly being met does it become fair to ask farmers to invest effort and money in improving their productivity. The burden to first move lies squarely with the companies and the governments in the cocoa sector. We cannot ask the poorest and most vulnerable link to take the biggest risks, with the least guarantee for reward. In that regard, the anti-poverty approaches in the cocoa sector have had exactly the wrong chronology for the past two decades. With an unsurprising, although unfortunate, outcome: they have failed.

Summary

Living income is a right, and should be regulated

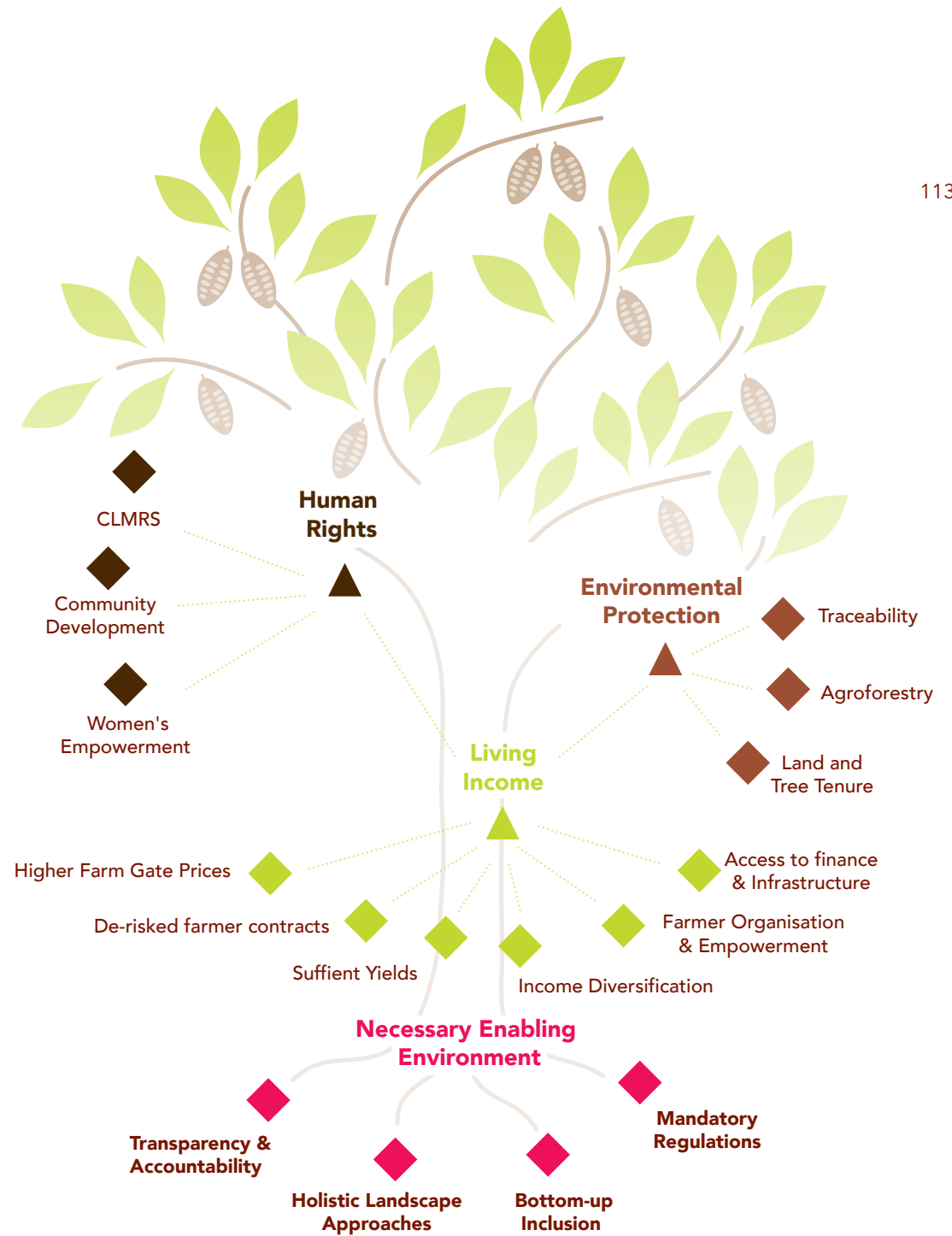
Living income is a human right, and a necessary precondition for all the other challenges in the cocoa sector to be properly addressed. And though it has become an accepted goal for the cocoa sector, there is a lack of concrete and time-bound commitments towards a living income, either by individual companies, by governments, or by sector-wide initiatives. Living income must become mandatory, and therefore enshrined in the due diligence regulations being drafted presently.

Changed business model

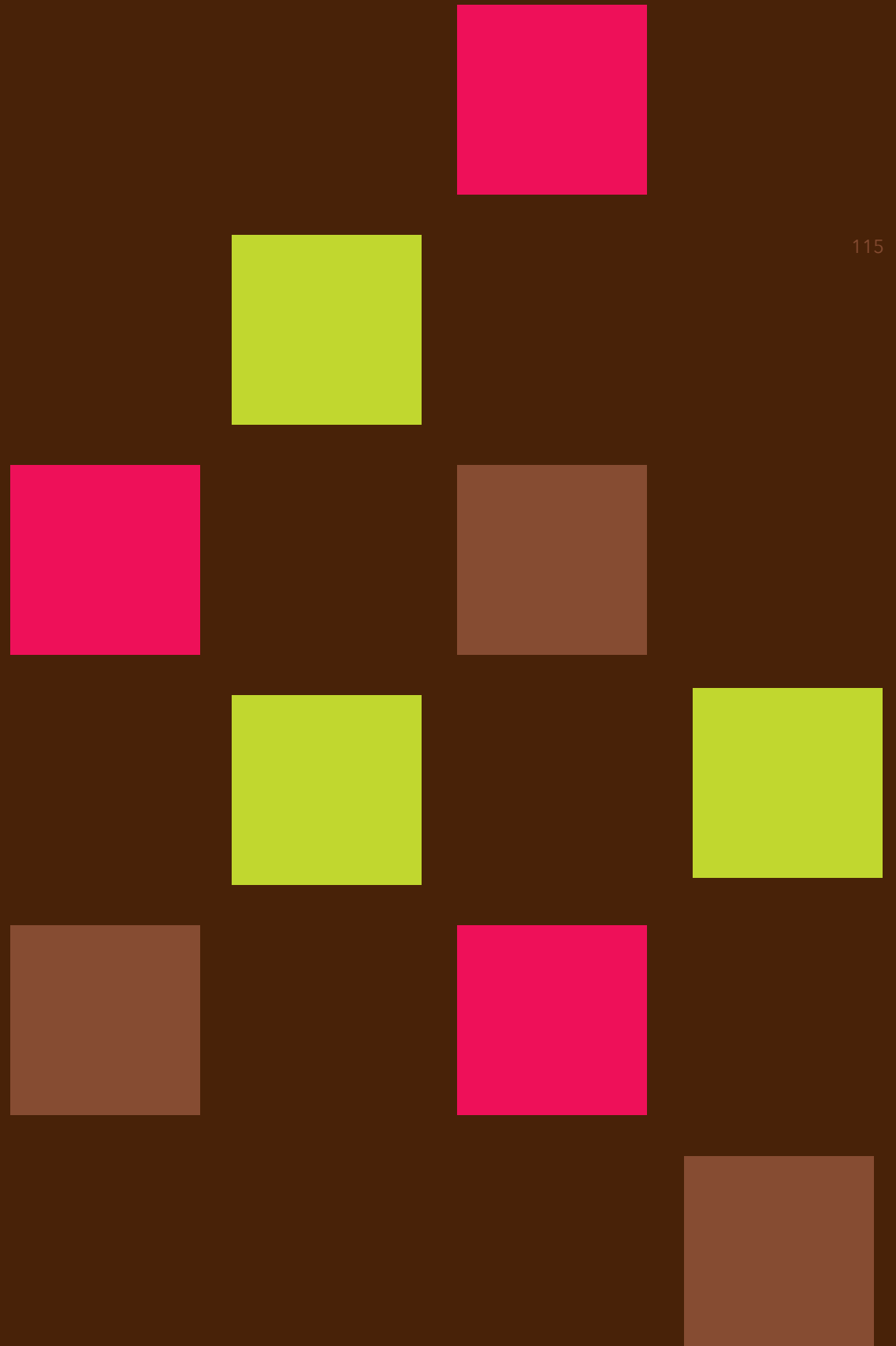
In all this, there is very little conversation about the industry's business model, including about how they set the prices they pay. As a result, most farmers are still not earning a living income, and not a single stakeholder group is currently doing what they should be doing to ensure farmers achieve a living income.

Start with governance and purchasing practices

For living income to become a reality for cocoa farmers, action is necessary on three separate dimensions at the same time: good agricultural practices, good governance policies, and good purchasing practices. Any corporate or government effort that does not move significantly on all three dimensions at the same time will not be an adequate response to the challenge. However, not all three dimensions have an equal status. Good Agricultural Practices are only a worthwhile strategy if cocoa is sufficiently remunerative. Only when both the responsibilities of corporations and governments are properly being met does it become fair to ask farmers to invest effort and money in improving their productivity. The burden to first move lies squarely with the companies and the governments in the cocoa sector.



9. Key recommendations



Key recommendations

For all stakeholders

- Scale up efforts significantly, to reflect the size and urgency of the problem.
- Implement a sector wide commitment to living income.
- Implement a global moratorium on deforestation.
- Ensure that the enabling environment of purchasing practices and governance policies are strongly improved before good agricultural practices are emphasised.
- Involve farmers and civil society as co-decision makers in all sustainability collaborations through inclusive and deliberative processes.
- Develop effective transparency and accountability mechanisms.
- Support a shift from monoculture to diversified production.
- Support capacity of farming communities to self-organise and have a bigger voice.
- Ensure that all sustainability approaches are tailored to include women and youth.

For companies

- Develop a time-bound living income action plan that includes purchasing practices.
- Commit to a living income reference price.
- Engage farmers in long-term asymmetric contracts.
- Implement transparent and effective CLMRSs to cover the entire supply chain.
- Implement full supply chain traceability to farm level.
- Implement holistic environmental and human rights Due Diligence policies.
- Full supply chain transparency on sustainability payments, including Living Income Differentials, country differentials and certification premiums.

For voluntary standards

- Make Living Income and the payment of a living income reference price a key requirement.
- Strengthen and enforce the Trader Codes of Conduct, requiring as much change from multinationals as cocoa farmers need to.

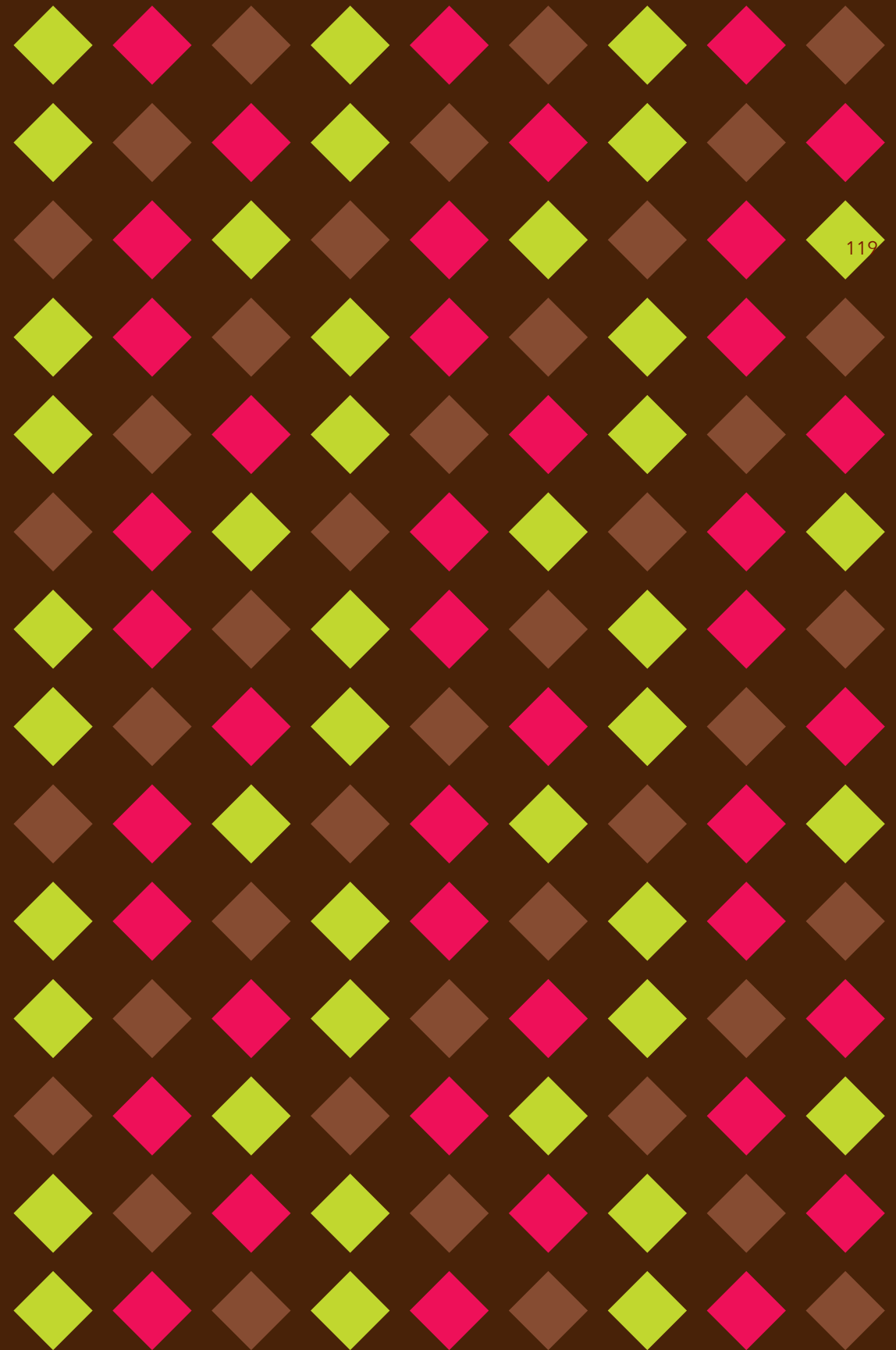
For governments of cocoa consuming nations

- Enshrine living income as a key part of any Human Rights and Environmental Due Diligence regulation, requiring time-bound action plans by corporations
- Support representation of civil society and farmers
- Provide sustained financial and technical support to build producing country capacity, and to tackle farmer poverty, and to facilitate appropriate implementation of mandatory human rights and environmental due diligence.

For governments of cocoa producing countries

- Cooperate and work towards a LID, decoupling the price of cocoa from the commodity market to reflect the costs of production - including a living income.
- Implement supply management solutions.
- Significantly increase transparency and accountability of how public funds are collected spent.
- Develop and implement national cocoa monitoring and traceability systems on both deforestation and child labour
- Enforce protection of remaining forests.
- Embed cocoa plans in national rural and agricultural development strategies that focus on food sovereignty and rural infrastructure.
- Disclose annually the tonnages of cocoa sold, price received for cocoa sales, including all differentials, and price setup of farm gate price vs. world market price.

10. Colophon and Justification



Justification of tables and figures

Figure 1, page X, Figure 2, page Y

Farm size

GPS reported polygon mapping results of the questionnaire

Estimates on workload:

350 Kg/ha: 50 labour days - median

550 kg/ha: 75 - mean

800 kg/ha: 150

1000 kg/ha: 200

Available labour days

365 days - 104 weekend days - 20 sick days - 11 days off = 230 working days per person. These are 19 labour days per month.

Input costs per hectare

These are set higher than in existing studies due to the exploding prices for fertiliser and pesticides and the often-missing costs for seedling for the necessary replanting specifically if farmer should achieve permanently higher yields at US\$100 for 350 kg/ha, US\$250 for 550 kg/ha, US\$500 for 800 kg/ha, US\$750 for 1000 kg/ha, US\$11 per day as a living wage for Côte d'Ivoire, US\$13,5 per day as a living wage for Ghana

Wages for hired labour

The latest calculation of a living wage in Côte d'Ivoire (see <https://www.globallivingwage.org/living-wage-reference-value-rural-cote-divoire/>.) came up to XOF 137,545, which is US\$ 211 per month. (conversion rate September 2022), divided through 19 labour days add up to a daily wage rate of US\$11.

For Ghana the latest calculation of a living wage was done in spring 2022.

A living wage in a semi urban banana producing area was GHC 1,841 (USD 257) per month; (see https://www.globallivingwage.org/wp-content/uploads/2018/04/Updaterreport_Ghana_2022_29032022final.pdf.)

Again based on 19 labour days per month. US\$257 divided through 19 labour days result in a daily wage rate of US\$13,5.

These calculations are based on publicly available data and data submitted for the questionnaire. The authors welcome any corrections and challenge all actors of the cocoa sector to be much more forthcoming with public data.

Figure X Traders and Grinders

- (1) using ICCO conversion rates: Cocoa butter 1.33, Cocoa paste/liquor 1.25, Cocoa Powder and cocoa cake 1.18
- (2) fiscal year 2020/21
- (3) fiscal year 2020/21, Cargill reported to have sourced between 750,00 - 1 million tonnes, we took the middle of that range
- (4) Sudden reported to source 450,000 - 600,000 tonnes per year, we took the middle of that range
- (5) 100% of the grinded beans are traceable to cooperative level and 45% of the grinded beans are traceable to farm level, but due to additional volumes needed to produce chocolate the percentage is reduced to respectively 87% and 38%"
- (8) only for Côte d'Ivoire and Ghana / only direct bean sourcing

Figure Chocolate Producers

- (1) using ICCO conversion rates: Cocoa butter 1.33, Cocoa paste/liquor 1.25, Cocoa Powder and cocoa cake 1.18
- (2) fiscal year 2020/21
- (6) Hersheys reported to source 200,000 - 240,000 tonnes per year, we took the middle of that range
- (7) Estimates by the authors
- (9) both certification schemes like Rainforest Alliance and Fairtrade as well as cocoa supplier standards and programs such as Cocoa Horizon.
- (10) Since 2020 Hershey has upheld its commitment to Source independently verified cocoa (by volume) through: Fair Trade USA, Rainforest Alliance and verified supplier programs
- (11) Based on 78.5% farm polygon mapping in program supply chain covering 75% of cocoa

Colophon

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We appreciate the effort of companies and standards bodies in answering our questionnaires, as well as the many respondents to the Consultation Papers that were the lead-up to the 2022 Cocoa Barometer.

The final responsibility for the content and the views expressed in this publication lies solely with the authors.

The 2022 Cocoa Barometer is based on publicly available data as well as the off-record information provided to the authors. The authors welcome any corrections to data provided and challenge all actors of the cocoa sector to be much more forthcoming with public data on the core challenges the sector faces.

Inclusion and southern voice in the 2022 Cocoa Barometer

Consultation workshops were held in Abidjan and Accra in February 2022. These workshops formed the basis of the content of Barometer, before the development of the structure of the Barometer could begin. Furthermore, CSOs in Ghana and Cote d'Ivoire were actively invited to be part of the Barometer Consortium. These steps were taken to ensure the voice of the Global South was at the table from the very first stages of development of the Barometer. However, lessons were also learnt, and for the next Barometer we will include longer responses times and more space in the budget to ensure interim versions of this paper will also be available in the relevant languages besides English.

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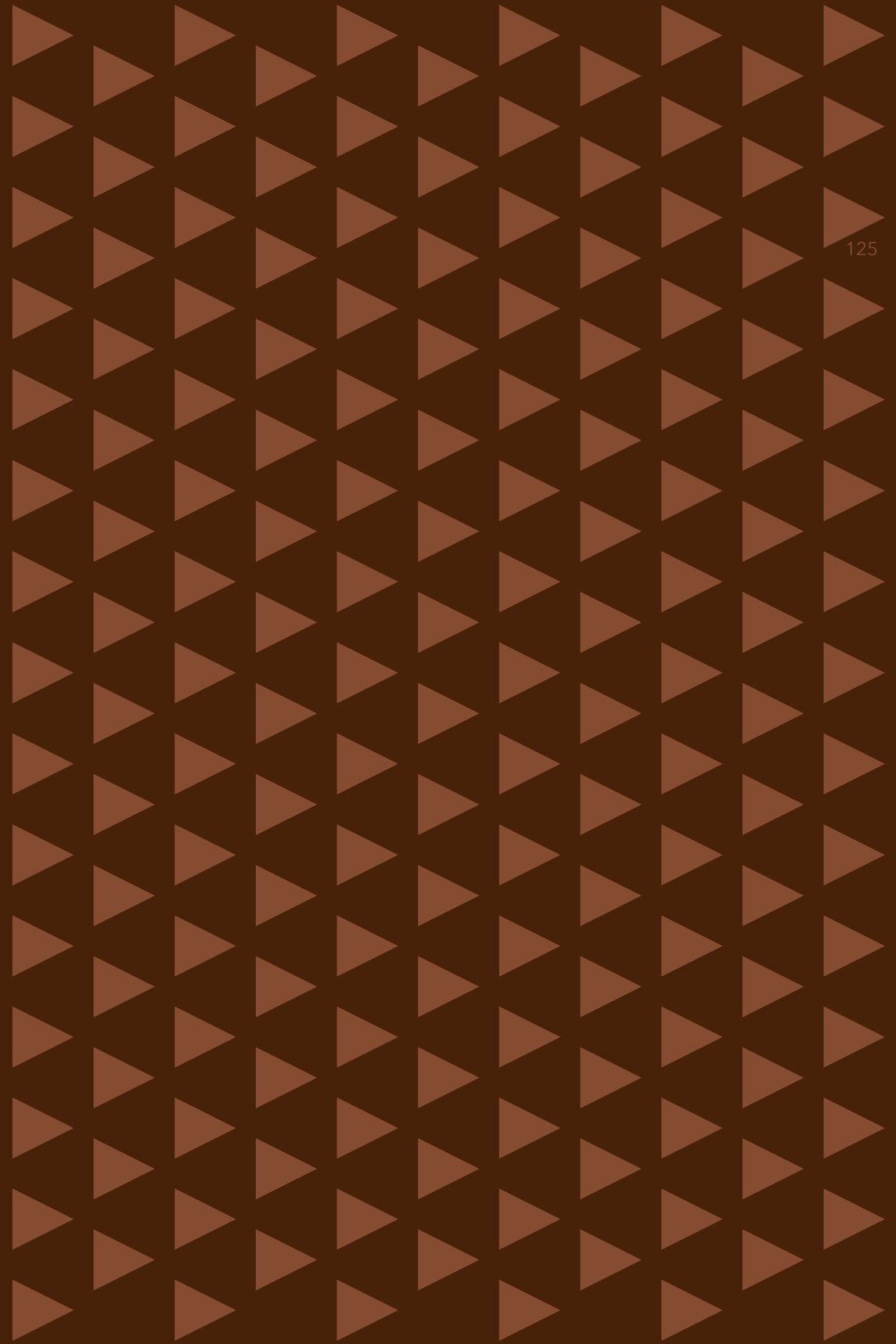
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