COCOA COMPASS

2020/21 IMPACT REPORT

ofi
make it real

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WORKING TOGETHER TO MAKE OUR SUSTAINABLE COCOA AMBITION REAL

I'm delighted to share our second Cocoa Compass impact report, which covers the cocoa crop season October-September 2020/21. And what a period it's been. The world has had to navigate an existential rollercoaster, from living with a global pandemic to keeping the 1.5 degrees pathway alive after the promises made at COP26.

For us, the last year has tested our resilience and our relationships, and it has also been a year of exciting change. We became **ofi**, a new company helping customers respond to the growing appetite for natural, healthy, and sustainable food. But we can't do that without a professionalized cocoa supply chain, where farmers earn a living income, child labor is eliminated, and the natural world is protected.

By collaborating with farmers, customers, sustainability partners, and governments, we increased our sustainability programs to cover **275,089** farmers. We also made headway across all three of our focus areas, underpinned by AtSource, our sustainability insights platform, which can offer our customers detailed impact metrics on their supply chains. Here are some highlights:

DRIVING THE CLIMATE AGENDA BY INVESTING IN NATURE

1. After achieving **100%** deforestation monitoring in our direct supply chain in 2020, we went a step further by polygon mapping **68%** of our sustainability programs. This extra layer of insight is helping us act to prevent deforestation by giving cocoa communities the training and support they need to protect forests.

2. Under the multi-stakeholder Cocoa & Forests Initiative (CFI), we distributed **864,979** forest trees to cooperatives in Côte d'Ivoire to help restore forests. We trained **40,292** farmers in Ghana on farming techniques to protect landscapes. And, with our customers and partners, we expanded our forest programs in Brazil, winning BusinessGreen's Nature-Based Project of the Year award for our work in Pará.

3. By investing in clean energy initiatives across our global processing operations, such as cocoa shell boilers and green electricity, we achieved a significant reduction in our emissions per metric ton of product of **11%**[1].

EMPOWERING COMMUNITIES TO GROW BY PUTTING CHILDREN FIRST

1. Child labor remains a serious challenge. However, we identified **6%** fewer recorded cases than in 2019/20. And thanks to extending our digital child labor monitoring and remediation system (CLMRS) app to cover even more households, we captured detailed data showing **62%** and **33%** of cases were children carrying heavy loads and weeding, respectively. **86%** were attending school while helping on the farm. Children assisting their parents in this way is, in the main, not a form of child labor and must be seen through the local cultural context.

2. We supported **31,291** more children to access education through distributing school supplies, birth certificates needed for enrolment, and constructing or rehabilitating classrooms.

3. We know the root cause of child labor is poverty. So, we've continued to help farmers commercialize, paying them a premium for high quality and sustainable cocoa. And we've kept partnering with customers to help cocoa communities save **USD 1.5million** in Village Savings and Loans Associations.

SUPPORTING LIVELIHOODS BY FOCUSING ON FARMERS

1. We helped farmers across all our programs in nine countries to increase productivity to **635kg** per hectare (**+9%** from 2019/20), a critical ingredient for achieving a living income.

2. We developed an initial model showing **20,865** farmers across all our sourcing countries are already earning a living income, giving us a better understanding of the nature and extent of the existing income gaps in our supply chain and how to close them.

3. Our plant science trials focusing on best practices for growing higher quality cocoa without harming the environment, showed farmers who apply techniques like proper pruning can boost their yields by up to **20%** per year.

Our positive impact in cocoa communities is thanks to the joint efforts of all our partners. These issues are bigger than any company or organization standing alone, and we need collaboration and regulation to achieve structural change.

We are now working towards our 2024 milestones and beyond. These are long-term ambitions, so we won't get there in a year. But with these new levels of insight and collaboration, and the energy and passion of our teams, I'm confident we can continue to take positive steps in the months to come.

Gerard A. Manley, CEO of ofi**'s Cocoa platform and Chief Sustainability Officer of** ofi

[1] Product output includes a mixture of cocoa beans, cocoa powder, cocoa liquor, and cocoa butter.
[2] International Labour Organization

PROGRESS ON A PAGE

We launched Cocoa Compass with the ambition to create a more positive future for cocoa by 2030, one in which farmers are earning a living income, children come first, and the natural world is protected. Despite a global pandemic, we've continued to work towards making this ambition a reality. Here we show a summary of progress from our 2017/18 baseline year until the 2020/21 cocoa crop season[1]. You can view our full results in the Data Hub.

EMPOWERED TO GROW

2030 GOALS

- Child labor is eliminated from our supply chain
- All children of cocoa farmers in our supply chain have access to education

HOUSEHOLDS COVERED BY A CHILD LABOR MONITORING AND REMEDIATION SYSTEM (CLMRS)

2017/18	2019/20	2020/21	
43,054	183,298	218,437	(+407%)

CHILDREN RECEIVING EDUCATIONAL SUPPORT

2017/18	2019/20	2020/21	
18,100	26,051	31,291	(+73%)

CHILDREN NO LONGER IN CHILD LABOR

2017/18	2019/20	2020/21	
488	2,341	3,984	(+716%)

FOCUSED ON FARMERS

2030 GOAL

- 150,000[2] farmers in our supplier network are achieving a living income

FARMERS TRAINED IN GOOD AGRICULTURAL PRACTICES (GAP)

2017/18	2019/20	2020/21	
117,645	149,279	171,824	(+46%)

COCOA SEEDLINGS DISTRIBUTED

2017/18	2019/20	2020/21	
4,787,401	3,148,096	2,895,417	(-40%)

HECTARES OF LAND REHABILITATED

2017/18	2019/20	2020/21	
4,122	5,521	7,310	(+77%)

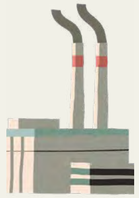
INVESTING IN NATURE

2030 GOALS

- 30%[3] reduction in natural capital costs
- Create an increase in tree carbon stock

TREES DISTRIBUTED FOR AGROFORESTRY & INCOME DIVERSIFICATION

2017/18	2019/20	2020/21	
381,755	733,183	1,745,058	(+357%)



CO_2 EMISSIONS PER METRIC TON OF PRODUCT OUTPUT FROM PROCESSING [4]

2017/18	2019/20	2020/21	
0.27	0.25	0.22	(-19%)

USD NATURAL CAPITAL FROM AGRICULTURE, SEQUESTRATION & TRANSPORTATION

2017/18	2019/20	2020/21	
1,144	1,191	873	(-24%)

[1] The 2019/20 data we show here differs slightly from the figures shared in our previous report due to an internal auditing process. [2] 60,000 by 2024. A living income is defined as an amount that covers a farmer's basic needs such as food, housing, education and healthcare. [3] 10% by 2024. Nature capital accounting assigns a monetary value to natural resources like forests and healthy soils. [4] This refers to emissions released during the production of our cocoa powders, butters and liquors. [5] The impact on nature from cocoa production such as GHG emissions.

UPDATE ON TRACEABILITY

OUR APPROACH TO TRACEABILITY

01

For several years, we've been building a traceability system that helps connect our customers to the people and places behind their products. In 2020, we hit our first milestone of 100% traceability of the cocoa we source directly. This means that for two-thirds of our global supply **(approximately 569,104 metric tons in 2020/21)** across nine countries, we can trace it back to the farm, farming cooperative, farmer group, or community. As part of this commitment to transparency, we continue to publish lists of all our suppliers in our sustainability programs. And the Chocolate Scorecard, which assesses chocolate and cocoa companies on key sustainability metrics, recently acknowledged our progress in this area. Compared to the previous year, it upgraded our Traceability and Transparency rating to 'leading the industry on policy,' giving us the highest score amongst our peers and benchmarking us 9th overall out of the 35 companies surveyed. In our conventional and indirect supply chain, we are engaging with an increasing number of suppliers on the Supplier Code principles but it may not be possible to include all conventional and indirect suppliers (for example, government entities) in a bilateral Supplier Code agreement. That's why we also work with bodies such as the World Cocoa Foundation and European Cocoa Association, and national governments in sourcing countries, to improve industry practices. This is an alternative method of achieving systemic change in supply chain practices and extending traceability and supply chain compliance to our sustainability policies[1].

DIRECT SOURCING:
BUYING COCOA FROM A FARM, FARMER GROUP, OR COOPERATIVE

CONVENTIONAL AND INDIRECT SOURCING:
BUYING COCOA FROM GOVERNMENT BODIES AND NATIONAL OR INTERNATIONAL SUPPLIERS

COLLABORATING WITH GOVERNMENTS AND PARTNERS

As a board member of the European Cocoa Association (ECA), we are scaling up our efforts to ensure compliance with pending EU sustainability legislation, including the recently published proposal for a Directive on Corporate Sustainability Due Diligence. Throughout 2021, we participated in the working groups of different national sustainability platforms, like the Dutch Initiative on Sustainable Cocoa (DISCO), of which we are a steering committee member. And we have actively collaborated with the governments of Ghana and Côte d'Ivoire on their national traceability systems, demonstrating our own system and willingness to share our data, to help accelerate collective efforts towards a more transparent and sustainable cocoa supply chain.

[1] Conventional cocoa is mainly sourced indirectly and comes from cocoa farms where there are no third-party verified sustainability programs in place.

THE VALUE OF DIGITAL TRACEABILITY

02

SEBASTIEN KOUASSI
TRACEABILITY OFFICER, **ofi**
CÔTE D'IVOIRE

With issues ranging from a lack of basic infrastructure to no internet connectivity, reaching 100% direct traceability was an enormous task. Last year, we faced a new challenge: convincing more farmer groups and cooperatives to switch from paper-based to digital traceability.

One of our Traceability Officers, Sebastien, explains how his team has implemented digital traceability in Côte d'Ivoire.

WHY DOES DIGITAL TRACEABILITY MATTER?

It helps protect the integrity of the data, meaning it can be captured and stored more easily with minimum delay and less chance of human error. Whereas previously, most cooperatives relied on information recorded by pen and paper and transferred along the many stages of the supply chain, now, every time there is a traceability audit, those who have transitioned can quickly source what they need in a centralized digital system.

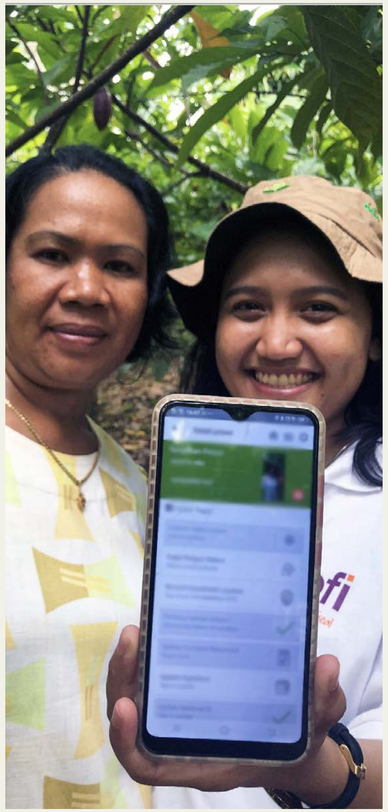
70% OF COOPERATIVES IN CÔTE D'IVOIRE ARE USING OUR DIGITAL SYSTEM

HOW ARE YOU MAKING IT HAPPEN?

We used a test and learn approach, focusing on five cooperatives initially. We first supply smartphones installed with our traceability app and then train each cooperative on using it. Today, we have around 70% of cooperatives - about 150 in total - using the digital system, and we aim to reach 100% by 2023/24. But as we regularly add more cooperatives to our sourcing network each cocoa season, the job is never completely done!

WHAT IS THE BIGGEST CHALLENGE?

The behavior change aspect. Even if you overcome the infrastructure and lack of internet, it means nothing if people don't buy into the technology. Understandably, many cooperative leaders were skeptical at first. We were asking them to abandon a process they had been following for a long time in favor of something new. That's why the trust and strong relationships we've developed over the decades made all the difference. Once we explained the benefits and ensured they had the proper tools and training, they were excited to partner with us to roll out digital traceability.



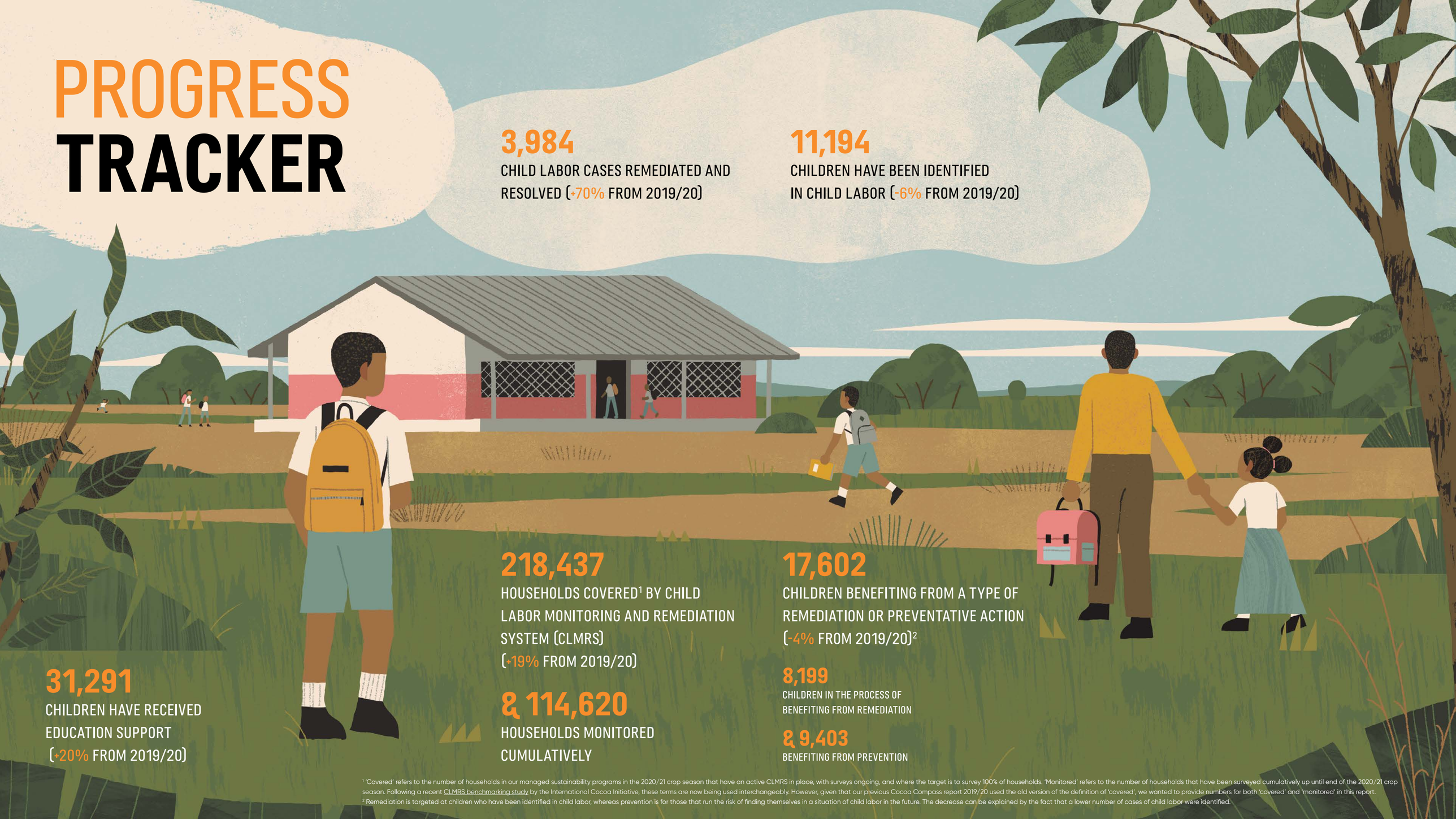
EMPOWERED TO GROW

2030 GOALS: ALL COCOA FARMERS' CHILDREN IN OUR SUPPLY CHAIN HAVE ACCESS TO EDUCATION • CHILD LABOR IS ELIMINATED FROM OUR SUPPLY CHAIN

PROGRESS TRACKER

3,984
CHILD LABOR CASES REMEDIATED AND RESOLVED (+70% FROM 2019/20)

11,194
CHILDREN HAVE BEEN IDENTIFIED IN CHILD LABOR (-6% FROM 2019/20)



31,291
CHILDREN HAVE RECEIVED EDUCATION SUPPORT (+20% FROM 2019/20)

218,437
HOUSEHOLDS COVERED[1] BY CHILD LABOR MONITORING AND REMEDIATION SYSTEM (CLMRS) (+19% FROM 2019/20)

& 114,620
HOUSEHOLDS MONITORED CUMULATIVELY

17,602
CHILDREN BENEFITING FROM A TYPE OF REMEDIATION OR PREVENTATIVE ACTION (-4% FROM 2019/20)[2]

8,199
CHILDREN IN THE PROCESS OF BENEFITING FROM REMEDIATION

& 9,403
BENEFITING FROM PREVENTION

[1] 'Covered' refers to the number of households in our managed sustainability programs in the 2020/21 crop season that have an active CLMRS in place, with surveys ongoing, and where the target is to survey 100% of households. 'Monitored' refers to the number of households that have been surveyed cumulatively up until end of the 2020/21 crop season. Following a recent CLMRS benchmarking study by the International Cocoa Initiative, these terms are now being used interchangeably. However, given that our previous Cocoa Compass report 2019/20 used the old version of the definition of 'covered', we wanted to provide numbers for both 'covered' and 'monitored' in this report.
[2] Remediation is targeted at children who have been identified in child labor, whereas prevention is for those that run the risk of finding themselves in a situation of child labor in the future. The decrease can be explained by the fact that a lower number of cases of child labor were identified.

PUTTING CHILDREN FIRST IN 2020/21

"FOR 15 YEARS, WE'VE TAKEN A LEAD ON ADDRESSING CHILD LABOR IN COCOA, FROM BEING ONE OF THE FIRST SUPPLY CHAIN COMPANIES IN OUR SECTOR TO JOIN THE FAIR LABOR ASSOCIATION (FLA) TO BRINGING A SUPPLY CHAIN-BASED DIGITAL CHILD LABOR MONITORING AND REMEDIATION TOOL TO COUNTRIES LIKE CAMEROON, BRAZIL, AND PAPUA NEW GUINEA."

– ANDREW BROOKS, HEAD OF COCOA SUSTAINABILITY, ofi

Together with our customers and partners, we increased the number of children receiving education support, like birth certificates and school supplies, classrooms, and school canteens by 20% compared to 2019/20. We also responded to the continued pressures of Covid-19 on cocoa communities, particularly on women and children, by offering maternal health services including nutrition coaching and child vaccinations in places like Indonesia. Out of the 11,954 instances we identified in 2019/20, 3,984 cases have been remediated and resolved. However, by putting in place a greater level of monitoring and by surveying more farming households, this meant that we were able to shine a light on previously unidentified cases. So, in 2020/21, we found an additional 11,194 instances of child labor, 8,199 of which have either already received or are in the process of receiving remediation support.

Last year, along with the International Cocoa Initiative (ICI) and its members, we pledged to scale up systems that prevent and address child labor for 540,000 cocoa-growing households in Côte d'Ivoire and Ghana by the end of 2021. Plus, in Global Child Forum's (GCF) Global Benchmark 2021 on The State of Children's Rights and Business, we scored 8.2 out of 10, the second-highest rating in our category.

But the industry still has a long way to go to tackle an issue as knotted as child labor. We continued to engage proactively in the Child Learning and Education Facility (CLEF) initiative, which aims to provide quality education for 5 million children by 2030. As a coalition partner of the Jacob's Foundation's TRECC: Transforming Education in Cocoa Communities, 200,956 children and youth in Côte d'Ivoire have benefited from educational opportunities in the last five years.

WHAT DOES OUR CHILD LABOR DATA TELL US?

01

Over 80% of the 11,194 instances of child labor we identified in 2020/21 **(-6% compared to 2019/20)** involved children undertaking hazardous tasks on the family farm. It is important to note that 86% of children identified in child labor in this period were also attending school, and only 3% of children reported having dropped out of school to work on the farm. Children were often involved in more than one type of hazardous task and the most commonly reported were:

62% carrying heavy loads

33% weeding with a sharp tool

11% digging holes

16% harvesting with a sharp tool

10% burning plots of land

7% removing tree roots

8% handling agrochemicals

24% breaking open cocoa pods with a sharp tool

HOW ARE WE RESPONDING?

8,199 out of the 11,194 instances of child labor identified have either already received or are in the process of receiving remediation support. The gap between these figures is due to several reasons. Some children identified in child labor turn 18 or move out of the community, meaning we are no longer required to establish remediation plans for them[1]. For others, it takes longer for the cooperatives, communities, farmer groups and households to establish remediation plans adapted to the individual's situation, for example, when schools or educational opportunities are located more than five kilometers away from the community. Despite these challenges, we work to ensure that all cases have an active and suitable action plan in place.

For most cases of child labor, raising awareness on what children are and are not permitted to do on the farm and under what conditions, as well as the consequences of hazardous work, is the first step of remediation. If the children are not attending school we seek to understand the reasons why and address these so that they can return to education, such as setting up scholarship funds, establishing birth certificates, and providing school supplies.

Often, the reasons can be due to structural factors such as the poor quality of education. That's why we participate in multi-stakeholder partnerships like CLEF, to meet school infrastructure needs and improve the quality of teaching at scale, or collaborate with farmer groups to build and renovate schools.

Supporting farmer households to increase their incomes is another important way in which we address the causes of child labor. We also establish labor groups at farmer group level to facilitate access to adult labor. You can read more about our approach to helping farmers in the Focused on Farmers section of this report.

[1] We align with the ILO's Indicators for Child Labor

2020/21 PROGRESS IN PARTNERSHIP WITH OUR CUSTOMERS

429
CHILDREN PROVIDED WITH BIRTH CERTIFICATES

9
EDUCATIONAL FUNDS SET UP BENEFITING **258** PUPILS

102
CLASSROOMS CONSTRUCTED OR REHABILITATED

USD1,506,498
SAVED IN VILLAGE SAVINGS AND LOANS ASSOCIATIONS TO HELP COVER EDUCATIONAL EXPENSES

20,436
SCHOOL KITS DISTRIBUTED

CRACKING THE BEHAVIOR CHANGE CODE

02

In its 2020 review of our cocoa supply chain, the Fair Labor Association (FLA) and Save the Children made a key recommendation around the need to accelerate change in norms, attitudes, and behaviors towards child labor in cocoa communities. This is critical to eliminating it.

Although raising awareness of how child labor is defined and its impact on a child's future is already part of our CLMRS, we started exploring how to improve our messaging and training materials last year. The key to this is understanding the structural and behavioral drivers that lead parents to allow their children to carry out hazardous tasks on the family farm. Such tasks include carrying heavy loads or using sharp tools, a common practice in cocoa production, as highlighted by recent research from NORC at the University of Chicago.

This is despite improvements in school attendance amongst children in cocoa growing areas, increasing from 58% to 80% in Côte d'Ivoire and from 89% to 96% in Ghana between 2008/09 and 2018/19[2].

We also began testing new ways to measure if this training is driving behavior change using Knowledge, Attitudes, and Practices (KAP) surveys. The FLA will continue to monitor our progress against the action plans we put in place in response to its findings.

[2] Assessing Progress in Reducing Child Labor in Cocoa Production in Cocoa Growing Areas of Côte d'Ivoire and Ghana, NORC at the University of Chicago, October 2020

"RAINFOREST ALLIANCE HAS WORKED CLOSELY WITH **ofi** OVER THE PAST YEAR ON A PILOT PROGRAM BRINGING TOGETHER TWO DIFFERENT MONITORING SYSTEMS, TO HELP TACKLE CHILD LABOR ACROSS TWENTY VILLAGES IN GHANA. THE COMBINATION OF OUR "ASSESS-AND-ADDRESS" TOOL WITH **ofi**'s CLMRS HAS RESULTED IN A SOLID HUMAN RIGHTS SYSTEM, THAT CAN SUCCESSFULLY IDENTIFY AND MITIGATE RISKS, AND HELP ESTABLISH COMMUNITY-BASED CHILD PROTECTION COMMITTEES.

AS A RESULT OF OUR COLLABORATION, TRAINING MATERIALS HAVE BEEN DEVELOPED TO ENSURE CERTIFICATION MANAGERS ON THE GROUND AND ASSESS-AND-ADDRESS COMMITTEES AT VILLAGE LEVEL HAVE THE TOOLS TO EXPLAIN AND IMPLEMENT THE SYSTEMS WITHIN THEIR COMMUNITIES. WE'RE PROUD OF OUR PARTNERSHIP WITH **ofi** AND HOPE THAT OUR COMBINED EFFORTS WILL HELP TO ELIMINATE CHILD LABOR ACROSS GHANA."

KUNERA MOORE,
DIRECTOR OF THEMES
RAINFOREST ALLIANCE

DETECTING AND DETERRING FORCED LABOR

03

Millions of people are victims of forced labor across the world, trapped in jobs into which they were coerced or deceived and can't leave, according to the International Labour Organization (ILO) global estimate. Although it's a rare occurrence in cocoa[3], companies like ours must take steps to have robust systems and processes in place to identify and stop forced labor in its tracks.

That's why, in 2021, the FLA ran focused training for the sustainability teams in our cocoa-sourcing countries to make sure they stay ahead of the latest guidance on preventing and remediating forced labor. We'll look to roll out similar training to the farmer suppliers we work with to help them better mitigate forced labor risks.

[3] Walk Free Foundation, Global Slavery Index 2018, estimated that 0.17% of children working in cocoa in Côte d'Ivoire, and 1.98% in Ghana, are forced to work by someone other than a parent.

A SAFE SPACE FOR CHILDREN

04

Last year, one of our partner cooperatives in Grand Zattry in South West Côte d'Ivoire, NECAB, decided to use its premiums to build a kindergarten. Bah Anne Brigitte, its director, explained how it's made a difference to the local community. Before, working parents had no safe place to leave young children. Either they had to take them to the farm where they were exposed to potential hazards or let them sit in on first-grade classes, leading to overcrowding in classrooms.

Gose Floria, a cooperative member, is relieved she can send her daughter to the kindergarten where she is properly looked after. She's also noticed that children who attend do better at school when they're older as they're already in a learning environment.

BACK TO SCHOOL

05

As one of the first companies to bring CLMRS to Cameroon, we identified 19 children in 2020/21 who urgently needed birth certificates to enroll in school and sit their final exams. For example, Lucie and Rodrigue Yende, both seven years old. They are grandchildren of Ambata Yende, a farmer in the Nyamongo region:

"Without help, my grandchildren would have been left on their own because getting birth certificates is not easy. The process is complicated, and it costs a lot to travel back and forth to the court and council to get the paperwork," he said.

Now, Lucie and Rodrigue can both attend school. Ambata added that he appreciated the training he received on the dangers of child labor and other issues that affect his family.

GETTING AHEAD OF CHILD LABOR IN PAPUA NEW GUINEA

06

Since 2013, we've been running sustainability programs across Papua New Guinea, currently supporting 12,000 farmers to overcome various challenges from limited routes to market and low yields, to lack of access to finance and essential training. In 2020, our monitoring flagged the country as an emerging hot spot for cocoa-related child labor, highlighting the importance of further expanding our efforts to tackle this issue beyond West Africa where there is the highest risk of child labor.

So, in 2021 we took action to prevent as many children as possible from engaging in child labor by identifying children at risk on our digital CLMRS app and tracking the effectiveness of remediation plans via the Olam Farmer Information System (OFIS). To help us do this most effectively, we invited the FLA to conduct a baseline assessment of our current child labor prevention activities. It included a review of our existing internal labor management systems, community and worker profiling using field surveys, and background interviews with organizations that operate in the region like Save the Children and CARE International.

SUPPORTING 12,000 FARMERS

The assessment shed helpful light on the context of labor issues in Papua New Guinea. It found that it's common for the whole family to engage in cocoa farming to contribute to the household's livelihoods. The reasons for this are diverse, from poverty that prevents families from hiring adult labor and gender-based discrimination, to high school drop-out rates driven by factors like lack of proper meals and bullying. However, stakeholder interviews confirmed that there is often a division of tasks where children only do light or less laborious work.

Overall, the FLA found that farmers and workers spoke highly of our contribution to their livelihoods through our programs. It also noted our continuous effort to improve cocoa prices and include incentives and training for farmer suppliers.

One suggestion for improving our training was to mirror what we have done in other countries and focus more on labor standards, grievance mechanisms, and fair incomes. It also highlighted that we need to help farmers follow through with remedial actions related to child labor.

Finally, the FLA suggested how we might collaborate with local and national NGOs to help raise awareness of the need to establish government policy on child and worker rights in Papua New Guinea and call for legislation that strengthens the private sector's efforts.

Going forward, we will incorporate these recommendations as we survey 100% of our farmers in managed sustainability programs in the country using our CLMRS system and work on corrective action plans where necessary, both of which we expect to complete by 2024.

2024 GOAL: 60,000 COCOA FARMERS IN OUR SUPPLIER NETWORK ARE ACHIEVING A LIVING INCOME

FOCUSED ON FARMERS

2030 GOAL: 150,000 COCOA FARMERS IN OUR SUPPLIER NETWORK ARE ACHIEVING A LIVING INCOME

PROGRESS TRACKER

635KG PER HECTARE

COCOA YIELD OF TRAINED FARMERS (+9% FROM 2019/20)

7,310

HECTARES OF COCOA FARMLAND REHABILITATED* (+32% FROM 2019/20)

*BASED ON NUMBER OF COCOA SEEDLINGS DISTRIBUTED TO FARMERS OR FARMER GROUPS

20,865

FARMERS IN OUR SUSTAINABILITY PROGRAMS ASSESSED TO BE EARNING A LIVING INCOME*

*PRELIMINARY RESULTS FROM A SAMPLE OF FARMERS

HELPING FARMERS TO PROSPER IN 2020/21

"AGRONOMY IS HELPING TO BUILD A CLEARER PICTURE OF HOW WE CAN FARM COCOA IN A SMARTER WAY, CREATING A MORE SUSTAINABLE FUTURE FOR BOTH FARMERS AND THE PLANET"
– PIERRE BROUN, HEAD OF COCOA & COFFEE PLANT SCIENCE, ofi

We've been working with our customers, partners, and national governments for nearly two decades to tackle low incomes for thousands of farmers in our sustainability programs.

For example, in 2020/21, we trained 15% more farmers on Good Agricultural Practices (GAP) and generated an additional 47,283 personalized Farm Development Plans (FDPs). We helped farmers in our sustainability programs to increase their yield to 635kg per hectare (+9% from 2019/20).

And with new investments to expand our processing operations in Côte d'Ivoire and Brazil, we're delivering greater value for farmers by increasing their market access.

We also took a step toward measuring how these activities are contributing to our goal to help 150,000 cocoa farmers in our supplier network to achieve a living income by 2030, with a preliminary model for calculating existing living income gaps.

THE ROAD TO A LIVING INCOME

01

WHY IS IT IMPORTANT?

Most cocoa farmers own very small plots of land, often with aging trees and declining production. This means that even if they sold their cocoa at a higher price, they're still unlikely to earn a living income. So, the industry must work with national governments and civil society to do more to create a professionalized and sustainable supply chain that gives farmers the holistic support they need to leave a life of poverty behind.

That's why, in 2019, we decided to not only continue the livelihood support we've been providing to thousands of farmers in our sustainability programs for nearly two decades but also set a goal to help 150,000 of them earn a living income by 2030[1].

HOW ARE WE ACTING ON OUR GOAL?

In 2019/20, we put the wheels in motion by leading an industry coalition with the Anker Research Institute and Sustainable Food Lab to establish third-party living income levels for five cocoa-growing countries[2]. We're aiming to complete all nine countries with the appropriate regional benchmarks in our sourcing network by the end of 2022.

The next stage was getting a better understanding of the nature and extent of existing income gaps. Since 2018, we have worked in partnership with sustainability consultancy, Dear Impact, to develop a model to gauge the real income levels of cocoa farmers in our sustainability programs and we can now show indicative income estimates for a sample across all our sourcing countries. These results are largely based on annually collected farmer data from the Olam Farmer Information System (OFIS), such as cocoa production volumes, farmgate prices, and off-farm income. Two data points - cocoa profit margin and percentage income from other farm goods - were collected from an additional survey, based on either a smaller sample of farmers or desktop research.

The results show that in 2021, 7%, or approximately 20,865 of the farmers in the sustainability programs we run in partnership with our customers,[3] were earning a living income from their economic activities,[4] including cocoa production. This varies a lot depending on the country. For example, 45% of farmers make a living income in Cameroon, where they benefit from relatively high cocoa production volumes and profit margins per farm, as well as a significant share of income from other crops. Whereas in Côte d'Ivoire, a relatively low cocoa farmgate price and profit margin, plus high living costs per household, means only 3% are reaching a living income.

WHAT'S NEXT?

This is an important benchmark, providing fresh insights into why some farmers are earning more than others and already indicating where we should focus our interventions. For example, we will continue to empower women in cocoa communities to take charge of their finances through Village Savings and Loans Associations and support farmers to diversify their incomes and increase their yields through better farm management.

By Q4 of 2022, we're aiming to conduct further quality verification of our OFIS data and create a more comprehensive and accurate digital tool to plot the incomes of all the farmers in our sustainability programs based on individual farmer data[5].

This will provide a clearer picture of how to address the gaps based on what we know works – and doesn't work – to accelerate progress towards a future where cocoa farmers have financial security.

45% OF FARMERS MAKE A LIVING INCOME IN CAMEROON

[1] A living income level covers a household's basic needs to maintain a decent standard of living, from housing and healthcare to education and other essentials. See full definition from The Living Income Community of Practice here.

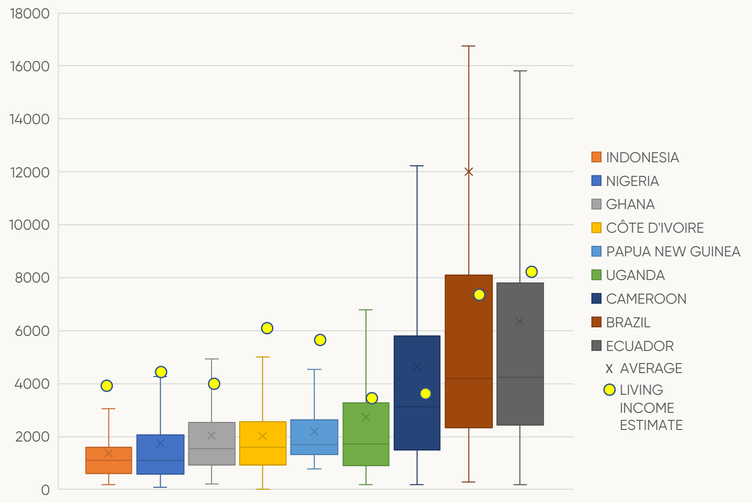
[2] For all other countries, we are using already available living income values.

[3] In 2021, we had 275,089 farmers in our sustainability programs.

[4] As our objective is to enable farmers and their spouse to earn a living income and provide for their families, we do not consider remittances, inheritance, gifts, and off-farm income earned by household members other than the farmer or the farmer's spouse.

[5] The tool will show income breakdowns from on-farm sources like growing cocoa or other crops and rearing livestock versus off-farm activities such as income from a small business, like soap making.

TOTAL NET HOUSEHOLD INCOME (USD/HOUSEHOLD)



Country	Percentage program farmers earning above living income	Weighted living income estimate (USD/household/year)
INDONESIA	4.8%	3,986
NIGERIA	7.2%	4,448
GHANA	10.1%	4,016
CÔTE D'IVOIRE	3.0%	6,141
PAPUA NEW GUINEA	3.0%	5,699
UGANDA	22.4%	3,498
CAMEROON	44.9%	3,615
BRAZIL	28.9%	7,396
ECUADOR	22.9%	8,196

20,865 program farmers earning above a living income (extrapolated)

COCOA FARMER LIVING INCOME RESULTS 2020/21

This graph shows the distribution of farmers in each cocoa sourcing country. The boxes represent 50% of all the farmers in our sustainability programs surveyed on OFIS. Medians and averages are indicated by the horizontal line and cross, respectively. The whiskers, or two lines outside the box, represent the 'minimum' and 'maximum,' with an upper limit of 1.5 times the interquartile range (height of the box). It is important to note that income distributions are typically positively skewed. This means that many farmers are above the displayed 'maximum.'

All living income values have been updated to June 2021 by accounting for inflation. This has been done directly by the Anker Research Institute or following a methodology verified and approved by them. Additional regional living income estimates for Indonesia and Uganda are also planned for the coming year.

WORKING WITH OUR CUSTOMERS TO PIONEER MORE SUSTAINABLE COCOA

02

In March 2021, we began a new partnership with Mondelēz International to create one of the world's single largest sustainable commercial cocoa farms in Indonesia.

At a 2,000-hectare cocoa farm in Seram – the largest island in Maluku province in Indonesia – we're working together to develop a scalable approach for the future of commercial cocoa farming. All while improving farmer livelihoods, empowering communities, and restoring a previously deforested landscape. We have rolled out advanced climate-smart and plant science technology to help protect against climate fluctuations and prevent loss of crops. These include an automated irrigation system that integrates information from weather stations and system flow pressures and collects data from soil sensors to determine how much moisture is present and tell our team exactly how much water the cocoa trees need. It also helps them make smarter use of chemical fertilizers by delivering them directly to the plants that need them, reducing water consumption even further.

And we're also planting more trees to support the area's rich biodiversity and create shade for the cocoa and adjacent riparian conservations, ultimately helping to boost cocoa yields further and create a sustainable income for the local community. To improve the living standards for the local community, we plan to renovate the local school and partner with nearby universities to educate students on how cocoa farming works and encourage them to take jobs in the sector.

Health remains an important priority with the ongoing effects of the Covid-19 pandemic. This is why we've helped provide the local community with fresh water and vaccinated 80% of plantation workers.

THE PROJECT IN NUMBERS

600 JOBS

for residents in an area with limited income opportunities due to its isolated location. Nearly half of these employment opportunities will go to women.

A SEEDLING NURSERY

that can grow up to one million high-yielding cocoa seedlings each year.

ACCESS TO HEALTHCARE & EDUCATION

for all employees and their families, as well as housing, electricity, water, and daycare for the families who live on site.

1,026 HECTARES

of land covered with smart irrigation technology.

2,000 HECTARES

of deforested brownfield land, planted with cocoa, shade trees, forest, and fruit trees to promote biodiversity and carbon capture. More than 1,080 hectares have already been planted.

51 HECTARES

have been identified as High Conservation Value forest and a vital habitat for flora and fauna and given complete protection.

HELPING FARMERS FIND NEW WAYS TO GROW THEIR INCOMES

03

ISAAC
COCOA FARMER,
GHANA

Isaac Ofori Asiedu, a farmer from the Western North Region in Ghana, completed a series of training programs as part of **ofi**'s project in the Sui River Forest Reserve with Partnerships for Forests (P4F) and Rainforest Alliance.

Isaac, who owns a 2.8-hectare cocoa farm, was trained on climate-smart agriculture which helped him to increase his harvest from nine bags of cocoa beans in the 2019/20 season to 12 in the 2020/21 season. Isaac hopes to build on this number.

He was looking for ways to earn more all year. Through the project, he received specialized training in vegetable cultivation and support, from the equipment he needed to get going like seeds, fertilizer, and insecticides, to technical advice in setting up his crop. Soon, he was growing cabbage alongside his cocoa trees.

Isaac found a market for his vegetables in the local community, as well as occasional customers from outside the village. After his first harvest, he made a profit of just under USD220.

"With the additional income, combined with money from my cocoa, I could provide for my household," he said.

Isaac is now close to securing additional land and plans on investing part of his profits in a water pump to help with irrigation of his cabbage crop. This means he can grow and earn even more.

TAI
HEAD OF A WOMEN'S ASSOCIATION,
CÔTE D'IVOIRE

Tai Simonne is responsible for the Women's Association in Zaipobly, in the South-West of Côte d'Ivoire.

It has 60 members from the communities nearby Tai's village and was formed three years ago when Tai, and others, were struggling to sell the tree seedlings from their nursery business. During a field visit in 2020, the **ofi** team discovered the forest trees nursery and were delighted to see women involved in forest tree production. Using our wider network, we bought forest trees produced by the Association and distributed them to our cooperative partners.

PRODUCED 81,400 FOREST TREE SEEDLINGS

In 2021, the Women's Association produced 81,400 forest tree seedlings for 19 of **ofi**'s farming cooperative partners. This initiative provided the women with their own income and gave them the opportunity to support their families with contributions towards school fees and other household expenses. Forest trees are also beneficial to cocoa farms, as they increase shade cover and protect against climate change. So, cocoa farmers received training on incorporating trees into their farms. Tai says:

*"We are now producing more than one million forest tree seedlings for **ofi** cooperatives and other partners such as SODEFOR [the Ivorian Forestry Development Agency]. And with the right help from **ofi**, like a modern irrigation system, this could increase to five million seedlings per year in the future."*

HOW PLANT SCIENCE IS HELPING FARMERS EARN MORE WITHOUT HURTING THE PLANET

04

BY PIERRE BROUN
HEAD OF COCOA & COFFEE PLANT SCIENCE, **ofi**

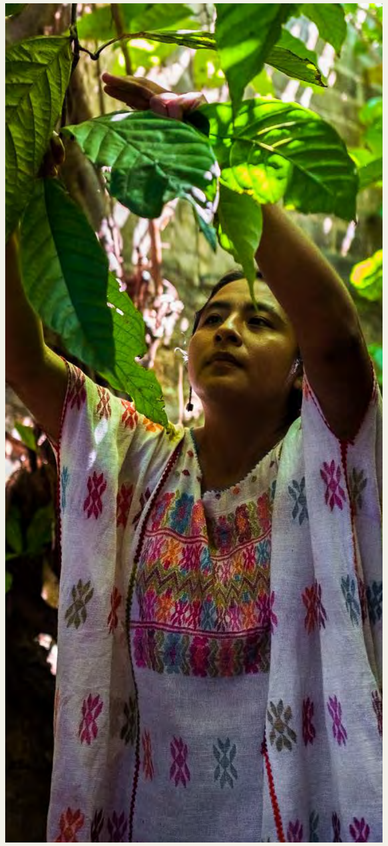
As a plant scientist, I seek to understand the biological factors influencing cocoa quality and yields. And I believe that understanding this can also be a powerful tool to tackle some of the industry's biggest challenges: helping farmers earn a living income and reducing carbon emissions. Through several research trials in 2021, my team and I made notable progress in both these areas.

> "THE MOST IMPACTFUL INTERVENTION IS VERY BASIC: WE FOUND THAT FARMERS WHO PRUNE THEIR TREES CAN SEE A REDUCTION OF 40-50% IN PEST OR DISEASE LEVELS WHILE IMPROVING THEIR PRODUCTIVITY BY UP TO 20%."

Firstly, fertilizers. There is still little consensus on how much to use or how this varies according to local conditions. We're working to change that by conducting fertilization trials across four countries and over 170 farms as part of the multi-stakeholder CocoaSoils Initiative.

The outcomes will inform best practices for fertilizer use, contributing to healthier soils and better yields for cocoa farmers across our sourcing network.

The second is cutting down on chemical pesticides. The most impactful intervention is very basic: we found that farmers who prune their trees can see a reduction of 40-50% in pest or disease levels while improving their productivity by up to 20%. Our agronomy teams are also testing novel non-chemical solutions to understand how we can help cocoa crops thrive in a way that protects nature. In Indonesia and Côte d'Ivoire, we're seeing promising results from our trials of chemical-free pest control. We're also exploring how we can use natural predators to kill off pests without resorting to pesticides in the first place.



And lastly, a two-year trial done in collaboration with farmers in Côte d'Ivoire and covering five cooperatives has been developed to determine the best pruning techniques by geographical region. The aim is to provide farmers with tailored advice about getting the most from their farms. Our results are encouraging, showing an average 20% increase in yield per year. Our agronomists have already taken on board the learnings and are adapting training to the specific needs of farmers.

Meanwhile, also in Côte d'Ivoire and currently expanding to Nigeria, a two-year study with 6,000 farmers into post-harvest practices, like fermentation, has proven that fermenting beans in wrapped banana leaves is the best way to preserve cocoa bean quality. We've distributed 142,000 banana trees and trained the farmers on how to look after them. So they can not only use the leaves to ferment their beans but also sell the bananas or use them as a source of nutrition for their families. These are just some insights into how

> "WE'VE DISTRIBUTED 142,000 BANANA TREES AND TRAINED THE FARMERS ON HOW TO LOOK AFTER THEM"

agronomy and plant science are helping to build a clearer picture of how we can farm cocoa in a smarter way, creating a more sustainable future for both farmers and the planet while delivering the best possible quality beans. Through our network of thousands of farmers around the world, we're able to test these innovations in different environments to help us understand whether they have the potential to be rolled out more widely.

EMPOWERING WOMEN IN COCOA

05

BY MELINDA THOM
SUSTAINABILITY MANAGER FOR **ofi**, BASED IN PAPUA NEW GUINEA

On average, women earn only 21% of the income that men do from cocoa production[8]. As the sector continues to grapple with a range of challenges, from aging farmers and low productivity to the expansion of cocoa farms into forests and child labor, now more than ever, we need to address the untapped resources of women in cocoa. By giving them the proper support, they can become the catalyst for more sustainable communities and healthier families.

As a signatory to the UN Women's Empowerment Principles, we've been promoting gender equality in our supply chain for many years through initiatives like Village Savings and Loans Associations that help women take control of their finances and training on how to access credit and open a bank account. In Ghana, our approach was recently commended by Oxfam. It identified that, out of the four companies highlighted in its research, only **ofi** is directly working to sensitize traditional authorities, family heads, and general community members to help women access farmland. It said further research is required to demonstrate that our interventions are translating to increased incomes for women and men.

In partnership with the U.S. Agency for International Development (USAID) and Lindt & Sprüngli, we launched a new pilot project within the Lindt & Sprüngli Farming Program in 2021 dedicated to enhancing women's recognition and remuneration in cocoa production in Papua New Guinea.

In the first year, we will teach 500 female farmers in the Morobe region new skills to help them boost their incomes, like making clothes and vegetable gardening. And we'll make sure the women have the right knowledge and tools when it comes to cocoa farming, including how to apply Good Agricultural Practices (GAP), so they have the best chance of increasing their yields. We think that for women to be successful entrepreneurs, they need tailored healthcare support, specifically on maternity care and child nutrition, as well as information on what constitutes gender-based violence.

> "**ofi** NOT ONLY BRINGS EXPERIENCE AND EXPERTISE IN DELIVERING HIGH QUALITY AND TRACEABLE COCOA TO THIS PROJECT, BUT IT ALSO SHARES AN AMBITION TO PROMOTE A MORE GENDER-INCLUSIVE SUPPLY CHAIN IN PAPUA NEW GUINEA. TOGETHER, WE'RE SUPPORTING WOMEN TO FIND NEW SOURCES OF INCOME, AND IMPROVE THEIR UNDERSTANDING OF NUTRITION, LEADING TO HEALTHIER FAMILIES."
>
> **TOM PRINGLE**
> DEPUTY CHIEF OF PARTY,
> CARDNO INTERNATIONAL DEVELOPMENT

So, we've enlisted the help of a specialized NGO, 'Femili PNG, to help us roll this out. If the project's first phase is successful, we'll aim to expand it to include more female farmers. Not only will it provide direct assistance to the women and their families, but also help the wider community to prosper.

[8] 'The New Queens of Cocoa', Fairtrade Foundation

2024 GOAL: 10% REDUCTION IN NATURAL CAPITAL COSTS

INVESTING IN NATURE

2030 GOAL: 30% REDUCTION IN NATURAL CAPITAL COSTS • CREATE AN INCREASE IN TREE CARBON STOCK

PROGRESS TRACKER

0.22

CO_2 EMISSIONS PER METRIC TON OF PRODUCT OUTPUT FROM COCOA PROCESSING (-11% FROM 2019/20)

1,745,058

TREES DISTRIBUTED FOR AGROFORESTRY AND INCOME DIVERSIFICATION (+138% FROM 2019/20)

873

USD NATURAL CAPITAL COST FROM AGRICULTURE, SEQUESTRATION & TRANSPORTATION (-27% FROM 2019/20)

77,841

HIGH-RISK FARMERS TRAINED ON OUR LIVING LANDSCAPE POLICY (-12% FROM 2019/20)*

*THE REDUCTION IS DUE TO ONE OF OUR SUSTAINABILITY PROGRAMS ENDING.

PROTECTING THE NATURAL WORLD IN 2020/21

"ADVANCED MAPPING TECHNOLOGY IS A CRITICAL TOOL FOR CREATING A DEFORESTATION-FREE COCOA SUPPLY CHAIN. AS PART OF THE EUROPEAN COCOA ASSOCATION, WE'RE ADVOCATING FOR ALL COCOA FARMS TO BE GPS POLYGON MAPPED."
– ERIC NEDERHAND, VICE PRESIDENT EUROPEAN GOVERNMENT RELATIONS, ofi

After reaching 100% deforestation monitoring in our direct supply chain in 2020, we spent last year rolling out more granular GPS polygon mapping, giving us a clearer view of where we need to act and when.

But to have an impact at scale, we need to combine efforts on the ground with legislation in both cocoa consumption and production countries, as well as encourage more collaboration across the industry. For example, as a founding signatory to the multi-stakeholder Cocoa & Forests Initiative (CFI), we published a standalone report with the latest updates on how we are working to end deforestation in Côte d'Ivoire and Ghana.

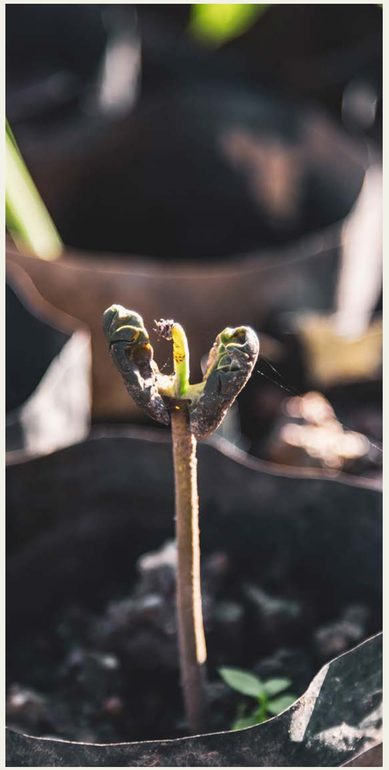
As demonstrated by our sustainability insights platform, AtSource, our customers have continued to partner with us on transformational sustainability projects. From restoring previously deforested land in the Brazilian Amazon to empowering communities to plant and manage shade trees in Ghana, we've been creating agroforestry systems that yield more cocoa, while capturing carbon and supporting local ecosystems. In 2020/21, we distributed over 1.75 million trees globally for agroforestry and income diversification (+138% from 2019/20).

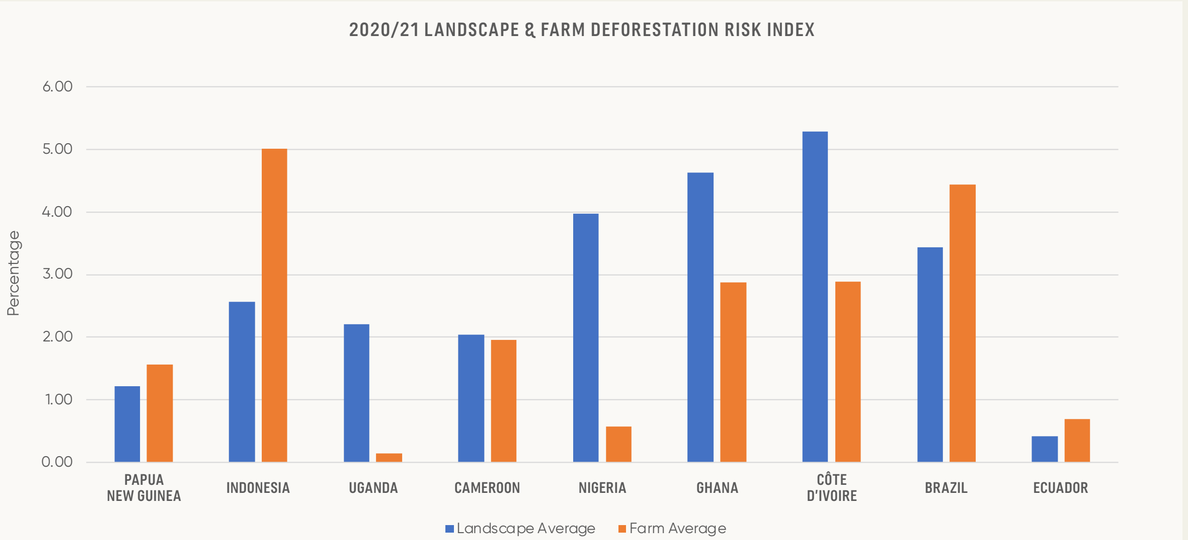
And we've invested in our cocoa ingredient processing operations, installing cocoa shell boilers to generate energy from waste cocoa shells, and solar panels to cut our CO_2 emissions per metric ton of product output from cocoa processing by 11% from 2019/20.

STRENGTHENING DEFORESTATION MAPPING

01

Our Forest Loss Risk Index (FLRI) combines recent deforestation rates with remaining forest cover to identify areas where future deforestation might occur. It allows us to better quantify risks and prioritize our resources to prevent as much tree loss as possible. In 2020, we mapped 100% of the farmer groups or local buying agents (LBAs)[1] we work with across nine countries[2], showing that 80% of our suppliers had a proven track record of no deforestation.





Any result above 4% indicates a high risk of deforestation[3]. We now know that 249 of these farmer groups had lower tree loss than previously thought, and only 49, compared to 173, were considered at high risk for future tree loss[4].

Last year, we further refined our approach by not only mapping the landscape surrounding a cocoa farm but also tracing its perimeter using GPS polygons. This information can be available to our customers via AtSource, our sustainability insights platform, and means that we can give them greater confidence that their cocoa has been grown within the farm's boundaries and not in protected forests nearby. So far, we have GPS polygon mapped 68% of the cocoa we source from our sustainability programs, with the aim of reaching 100% by the end of 2022, taking us one step closer to our goal to increase tree carbon stock in our cocoa supply chain by 2030.

Thanks to our polygon mapping technology, we now have an added layer of insight that will help us protect vital forests. The graph above shows deforestation risk at both the landscape and farm level across 320 farmer groups in our direct supply chain.

In particular, we found that farmer groups in Africa were consistently lower risk at the farm level, despite many countries facing challenges that are commonly linked to deforestation such as low yields and farmer poverty. While those in Latin America and Southeast Asia were the opposite, showing a higher risk of tree loss on the cocoa farm than in the surrounding landscape.

In the cases of Brazil and Ecuador, cocoa farms are close to some of the protected national parks, which may have previously masked the tree loss occurring in nearby agricultural areas. Countries like Papua New Guinea and Ecuador both have intact forests, and our farmer groups are low risk across the landscape and farm level. Overall, focusing on the farm level significantly lowers deforestation levels compared to the broader landscape.

"ADVANCED MAPPING TECHNOLOGY IS A CRITICAL TOOL FOR CREATING A DEFORESTATION-FREE COCOA SUPPLY CHAIN. AS PART OF THE EUROPEAN COCOA ASSOCIATION, WE'RE ADVOCATING FOR ALL COCOA FARMS TO BE GPS POLYGON MAPPED UNDER THE EU'S DEFORESTATION REGULATION PROPOSAL. THIS MUST BE PAIRED WITH TRACEABILITY SYSTEMS THAT ARE LINKED TO REGISTERED FARMERS IN COCOA-PRODUCING COUNTRIES."

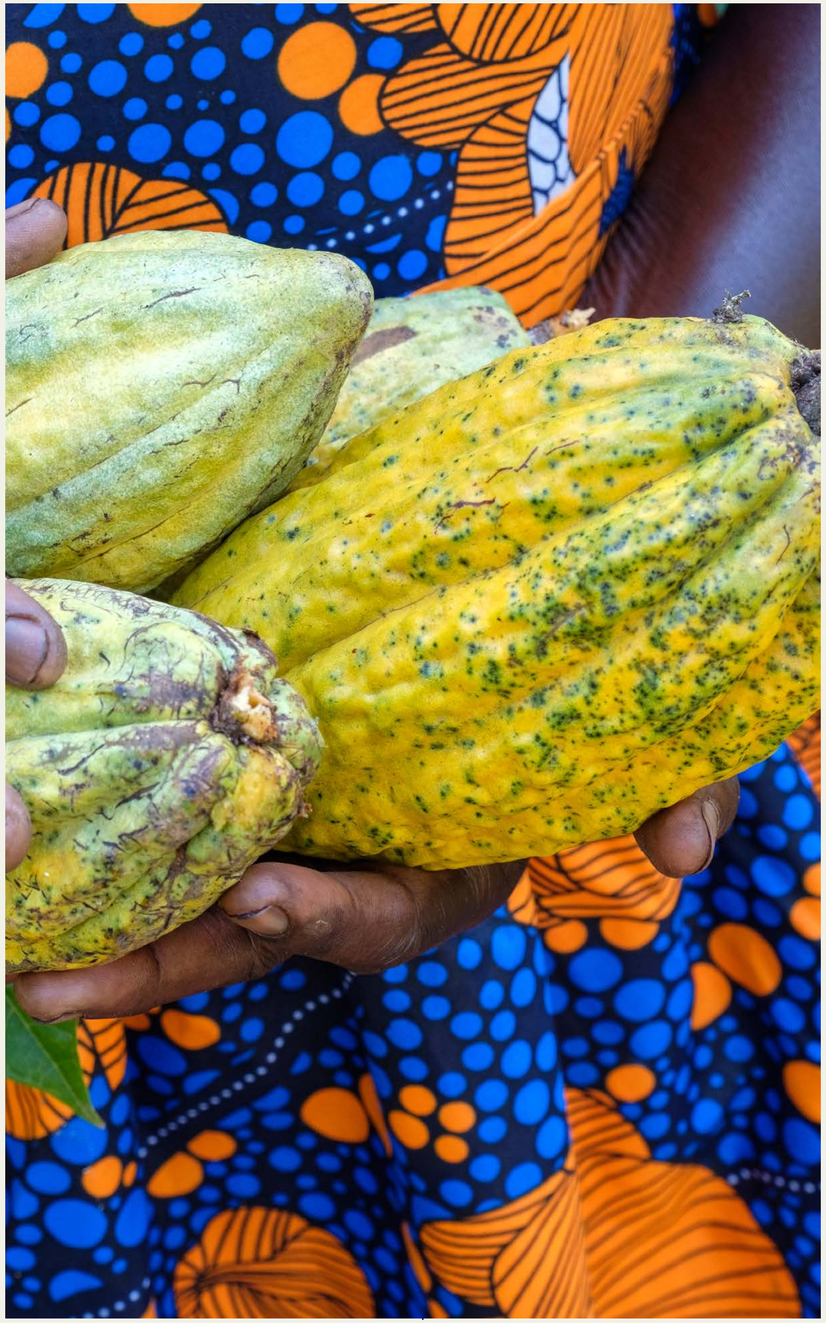
ERIC NEDERHAND,
VICE PRESIDENT
EUROPEAN GOVERNMENT RELATIONS, **ofi**

[1] Farmer groups and LBAs purchase cocoa directly from farmers and supply it to us.

[2] 11,895 farmer groups in 2019/20.

[3] The 4% threshold is based on the fact that a deforestation rate of 5% is usually considered high (leading to total forest loss in 20 years).

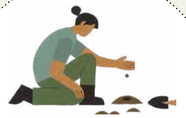
[4] Farm-level tree loss does not always mean deforestation or farm expansion has occurred. It could be due to on-farm activities like cocoa replanting, pruning, farm rehabilitation, or tree death, and off-farm factors such as gold mining, land erosion or urban expansion.



SAFEGUARDING FORESTS IN GHANA

02

In 2018, we started working with The Rainforest Alliance and the UK government's Partnerships for Forests (P4F) to protect and restore the Sui River Forest Reserve in the Western North region of Ghana. We worked closely with community members, local farmers, the Ghanaian Forestry Commission, and the Ghana Cocoa Board to introduce climate-smart agriculture techniques and restore land. We set up Landscape Management Boards to bring these stakeholders together and give the local community a say in how the land is managed. But we also went further, providing training and support to local farmers to help them transition to more climate-friendly farming techniques.



TRAINED 10,000 FARMERS ON CLIMATE-SMART AGRICULTURAL PRACTICES

By the end of 2021, we trained 10,000 farmers on climate-smart agricultural practices that will help them to improve their cocoa yields whilst lowering the environmental impact. Methods such as planting shade trees to protect cocoa crops and improve long term crop yields, as well as tree cover, are now being used across 4,000 hectares of land. To help farmers access the seedlings they need, the project established four community nurseries, which have grown over 176,000 seedlings.

We're now scaling up our work with The Rainforest Alliance across the Sui River Forest Reserve. The EU-funded Landscape and Environmental Agility across the Nation (LEAN) project will run for four years as part of the EU's flagship GCCA+ initiative, that helps the world's most vulnerable countries to address climate change. The project aims to conserve biodiversity, build climate resilience, and reduce emissions from land-use changes in the savannah, high forest, and transition zones of Ghana.

Working together with The Rainforest Alliance, World Vision, Tropenbos, and Ecocare Ghana, in the first year of the project we carried out an analysis of the challenges local communities face. Following this, we held sessions with 132 communities on the importance of protecting the environment and trained 2,600 farmers in climate-smart agricultural practices. The project seeks to give these communities a voice in the management of the local landscape and, so far, we have worked with 1,000 farms.

This means farmers can prove ownership of their trees, encouraging them to invest in their land and protect and conserve it for future generations. We've also been working to increase local tree cover and biodiversity. Through a grant from the Rick Steve Foundation, we have distributed 91,000 shade tree seedlings to help farmers restore degraded land, and the local Landscape Management Boards planted 1,000 additional trees as part of the Green Ghana initiative.

We're now expanding the project by involving more private sector partners and partnering with USAID with an ambition to restore 5,000 hectares of degraded land and improve incomes for 15,000 smallholder farmer households over the next five years.

[1] World Cocoa Foundation

CREATING TRIPLE POSITIVE IMPACT WITH ATSOURCE INFINITY

04

AtSource

Our partnerships in Ghana's Sui River and Pará, Brazil are registered on AtSource as Infinity projects, meaning they deliver a triple positive impact for farmers, communities and ecosystems. Through the collection of data and insights on the AtSource platform, we can support our customers to measure their impact and demonstrate progress against their social and environmental goals.

SCALING UP EFFORTS TO RESTORE THE BRAZILIAN AMAZON

05

Working closely with our partners, The Nature Conservancy, Mondelēz International, Partnerships for Forests, and Instituto Humanize, we have completed the first phase of our project to restore lost forest in Pará, Brazil. More than 250 smallholder farmers signed a zero-deforestation agreement to bring 14,000 hectares of land under sustainable management, and USD287,635 worth of credit applications were approved to help farmers invest in the future of their farms. We're now scaling up the project even further to cover 700 farmers and 48,000 hectares of this vital landscape by 2023.

"THE RESULTS OF THE FIRST PHASE ARE ALL THANKS TO A MULTIDISCIPLINARY PARTNERSHIP ESTABLISHED BETWEEN INVESTORS, INDUSTRY AND OTHER PARTNERS TO ALIGN STRATEGY, DEFINE PRIORITIES AND FIND SOLUTIONS TOGETHER. THE SECOND PHASE AIMS TO PROVIDE SCALE AND SUSTAIN POSITIVE OUTCOMES FOR THE LONG TERM WITH AN INCREASED FOCUS ON THE ROLE OF WOMEN IN AGROFORESTRY, TRAINING RURAL TECHNICIANS AND EQUIPPING YOUNG PEOPLE TO PROVIDE SPECIALIZED LABOR SERVICES."

BARBARA FERREIRA,
SENIOR PROJECT OFFICER
PARTNERSHIPS FOR FORESTS

BALANCING INCOMES AND ENVIRONMENTAL PROTECTION IN INDONESIA

06

In 2021, we teamed up with the German Federal Ministry for Economic Cooperation and Development (BMZ) and the Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH to establish a sustainable, transparent, and deforestation-free cocoa supply chain near the Lore Lindu Biosphere Reserve and National Park in Central Sulawesi, Indonesia.

The Reserve has one of Sulawesi's largest remaining mountainous rainforests, filled with unique biodiversity and archaeological sites. It's home to a local population who rely on farming in the surrounding area for their livelihoods. But low yields and farm gate prices mean that growing cocoa alone is not always enough to earn a living income.

The four-year project aims to help 4,000 farmers provide for their families, whilst protecting the natural landscape by promoting agroforestry.

To ensure traceability and transparency, we're implementing our digital OFIS tool. It collects key sustainability data to monitor and measure the success of the project, from GPS mapping that identifies any risk of deforestation, to information on income levels and child labor risks. We're also supplementing this with on-the-ground training and support.

EMPOWERING COCOA COMMUNITIES TO PROTECT LANDSCAPES

07

RESTORE (Resilient Ecosystems and Sustainable Transformation of Rural Economies) is a five-year project we're carrying out in partnership with The United States Agency for International Development (USAID), West Africa and The Rainforest Alliance. It will focus on the Sui River landscape in Ghana and three landscapes in Côte d'Ivoire: the south-eastern and south-western landscapes adjacent to the Taï National Park and the northern landscape near the Bossematie natural reserve. These are critical areas for conservation where the partnership will protect forest habitat and biodiversity, reduce deforestation, and increase the storage of carbon in trees within cocoa farms and the surrounding area.

TARGETING 15,000 COCOA FARMERS IN TOTAL

The project also aims to help income gap for cocoa farming households, by prioritizing income generating activities for women and young people while improving sustainable cocoa supply chains. It will be targeting 15,000 cocoa farmers in total, of which 25% will be women. RESTORE will be added as a new AtSource Infinity project.

JOSHUA
COCOA FARMER
GHANA

In 2020 we spoke to Joshua Armoh from Old Adiembra in the Western North Region of Ghana. Joshua has been a beneficiary of the Sui River P4F program, funded by the UK government, with **ofi** and The Rainforest Alliance. Through the program, he received training on climate-smart agriculture and agroforestry techniques, such as planting forest and fruit trees alongside his cocoa to help him increase yields while also helping the environment. By taking these steps, Joshua grew his cocoa harvest from six bags to ten. A year later, he became a community advocate of farming best practice management, which saw him promoted to lead farmer in his farmer group. Joshua's cocoa harvesting yield increased further from an average of ten to twelve bags of cocoa beans per season, and he earned USD1,131.

He says, *"The training and support I received made it possible for me to acquire another 1.5 hectare cocoa plot, providing me with the funds and opportunity to enroll in the local University to study Geography".*

On top of expanding his cocoa farming, Joshua also diversified his income by rearing livestock. When we checked in with him, he had fifteen chickens and six sheep on his farm.

PUTTING NATURE ON THE BALANCE SHEET

08

We've reached a point where nature no longer replenishes itself fast enough to meet society's needs. That's why, as **ofi**, we think nature should become central to our operational decision making. By assigning a monetary value or natural capital cost to our global cocoa operations, we can better measure and manage the true impact of our business decisions on the natural world.

Here we share our natural capital cost results up to 2020/21, from the farmers or farmer groups we work with in our sustainability programs to our global cocoa processing operations.

NATURAL CAPITAL COSTS FROM AGRICULTURE AND UPSTREAM TRANSPORTATION

In the cocoa supply chain, activities at the farm level from agriculture are the main contributor to our natural capital costs (NCCs). The resulting Greenhouse Gas emissions (GHG) have the biggest impact, specifically linked to Land Use Change (LUC) and crop residue management, which occurs when farmers discard opened cocoa pods that emit gases like nitrous oxide and methane.

In 2020/21, we successfully cut our total GHG emissions and related NCCs to USD873 per ton of cocoa beans from USD1,191 per ton in 2019/20, a 27% reduction. This continues the downward trend from our 2017/18 baseline of USD1,144 per ton with a 24% reduction, primarily due to farmer groups across multiple sourcing countries increasing their yields and respective sales volumes. The programs we run in partnership with our customers focus on giving farmers the tools and training they need to get the most from their farms without needing to encroach into forests. In fact, our results show West African cocoa farmers are reversing the LUC and the level of deforestation that has been reported for the last thirty years.

As detailed on page 26, in 2020/21, we took steps to improve how we estimate GHG emissions from LUC by refining our deforestation risk mapping. 68% of farms in our sustainability programs were GPS polygon mapped (across 91% of all farmer groups), allowing us to separate deforestation rates in the broader landscape surrounding the cocoa farms (using the farmer group radius approach) from the tree losses on the farms themselves (using farm polygons).

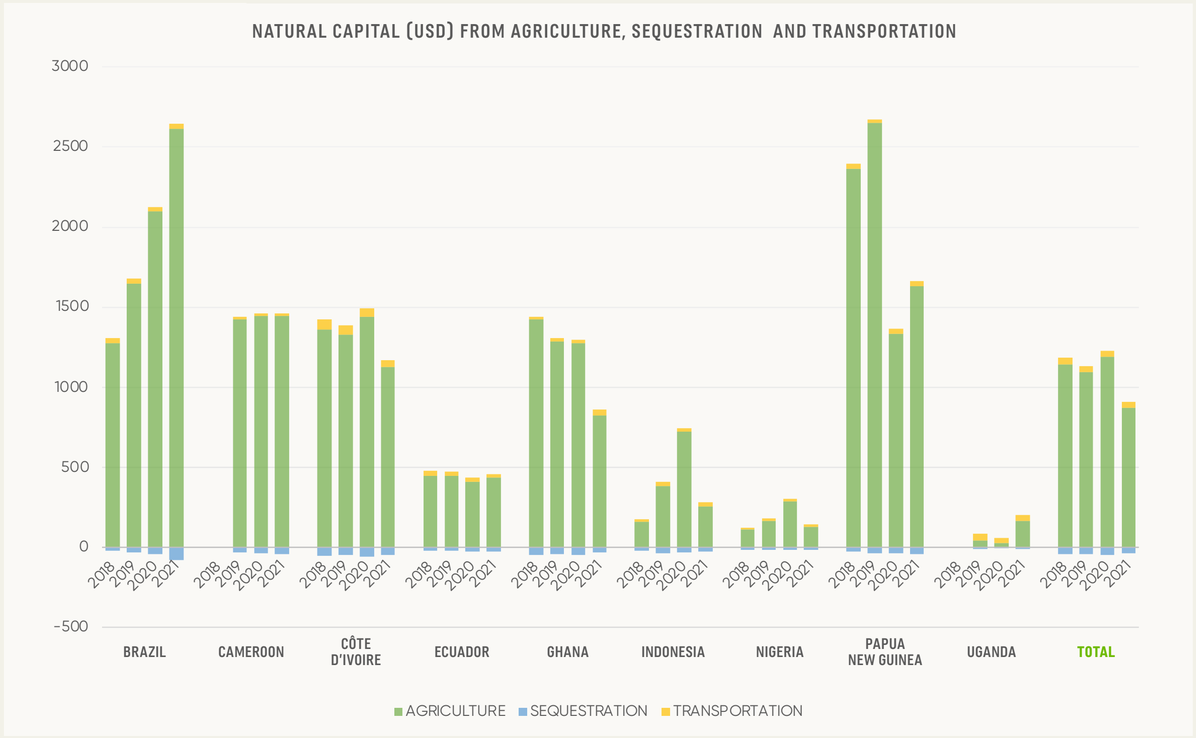
We are working to achieve 100% polygon mapping of all farmer groups in our sustainability programs by the end of 2022 to more accurately map where LUC may occur, support regular deforestation monitoring alerts, increase deforestation compliance requirements, and apply the latest satellite carbon stock measurement technologies to our upstream producers and suppliers.

Since the radius approach captures tree loss at a landscape level i.e. tree loss on both the cocoa farms and the surrounding landscape, we account for only 84% of total LUC emissions in the area when using this method to compensate for the LUC attributable to the larger area outside of the actual farms and then by another country-level factor based on The Food and Agriculture Organization of the United Nations (FAO) Land Use data[1]. To attribute forest loss due to cocoa farming we apply the percentage of deforestation in the region that is attributable to subsistence and commercial agriculture (84%), from Hosonuma et al. (2012)[2], as well as the proportion of agricultural land in the relevant country that is used for growing cocoa, as per the FAO Land Use data.

Brazil and Papua New Guinea recorded increased NCCs mainly due to LUC and less efficient crop residue management, implying that there had been higher levels of deforestation in cocoa-producing areas during the standard[3] 20-year period than previously estimated by the less accurate, farmer group radius method. The other countries, especially Côte d'Ivoire, Ghana, and Indonesia, had notably lower LUC over the same 20-year period up to 2019/20 than to 2020/2021, resulting in a net decrease in NCCs from LUC globally.

Regardless of national or local trends in LUC, we work with all farmers in our programs to assist them in growing cocoa more sustainably, from providing forest trees to replenish lost shade cover to training on how to compost opened cocoa pods to make organic fertilizer with lower emissions. Farmers are trained to apply these more environmentally friendly farming techniques, helping to reduce NCCs and rebuild the landscape's carbon stock.

We also saw NCCs benefits from the agroforestry systems[4] we've helped farmers develop in places like Brazil and Côte d'Ivoire, which show higher values per ton from carbon sequestration. Although sequestration savings are minimal so far, we are continuing to encourage farmers to plant forest tree seedlings as longer-term protection against climate change.



[1] FAO Land Use data

[2] We followed Hosonuma et al. (2012), an assessment of deforestation and forest degradation drivers in developing countries.

[3] A 20-year time frame for allocation of emissions due to LUC, used in alignment with the agricultural sector's best standard practice to date according to the SBTi FLAG project, GHG Protocol Agriculture Guidance, IPCC 2019 Refinement of Good Practice Guidance for LULUCF and Quantis International's Accounting for Natural Climate Solutions Guidance.

[4] Cocoa is grown alongside forest and fruit trees to help increase shade coverage on farm and generate an additional source of income for farmers.

NATURAL CAPITAL COSTS FROM COCOA PROCESSING

We continued to reduce our NCCs (GHG) from processing from USD22.3 per ton in 2020 to USD19.9 per ton in 2021, an 11% reduction. We can better understand the results by looking specifically at our CO_2 emissions per metric ton of product output.

Thanks to installing circular biomass boilers powered by waste cocoa shells and switching to green electricity[1], our emissions per metric ton of product output across all facilities from 2018-2021 were down 19% (11% in 2020/21). We plan to continue to invest in clean energy initiatives in all our facilities to drive down emissions further.

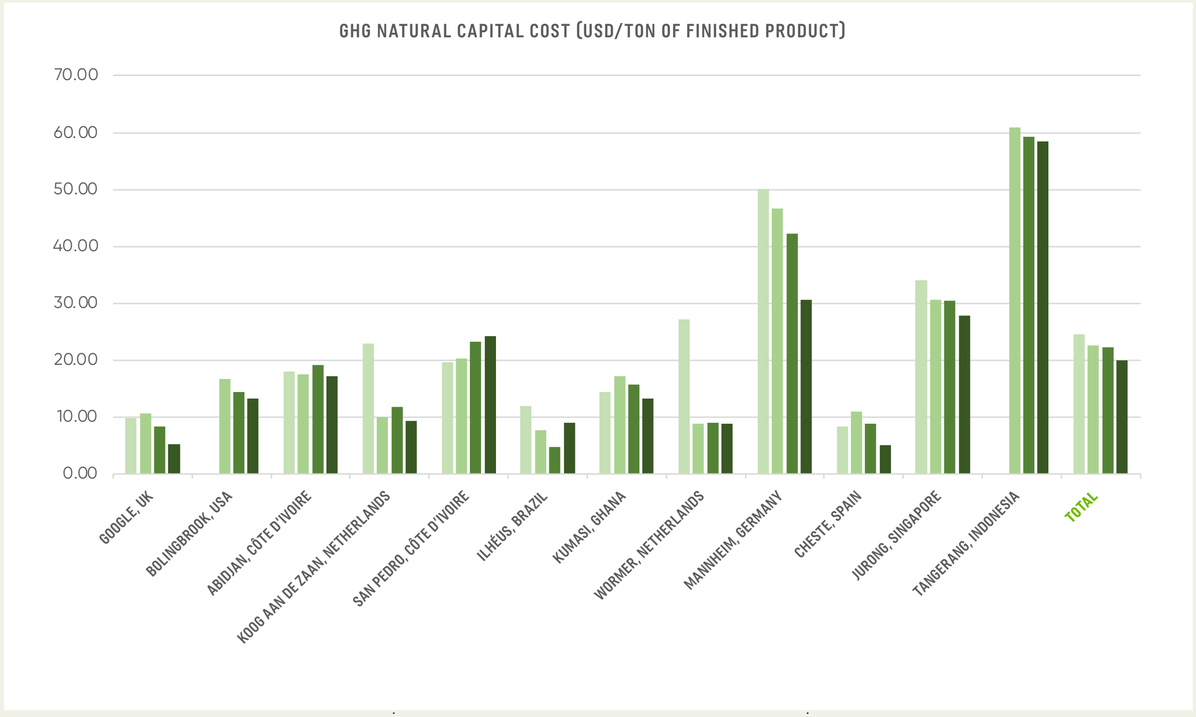
[1] We currently have circular biomass boilers in Ilhéus in Brazil, San Pedro, and Abidjan in Côte d'Ivoire, Tangerang in Indonesia, Jurong in Singapore, Koog aan de Zaan in the Netherlands and are installing one in Mannheim, Germany. We use 100% green electricity in Koog and Wormer in the Netherlands and Mannheim.

NATURAL CAPITAL REDUCTION IN ACTION

09

At our processing facility in Koog aan de Zaan in the Netherlands, the home of our premium cocoa ingredient brand, deZaan, we have installed a circular biomass boiler and are now targeting a 50% cut in natural gas usage, which will lead to a significant reduction in CO_2 emissions.

Along with other businesses and government bodies in the local Zaan area, we're supporting the decarbonization agenda of the Dutch government and the EU's Green Deal. As part of the Zaanstad Maakstad Association, we have commissioned research into industry's current and future energy needs and how we can collectively meet these needs through renewable sources.



Our cocoa shell boiler in Koog aan de Zaan, the Netherlands

DATA HUB

ANNUAL FIGURES UNLESS OTHERWISE STATED

	BASELINE YEAR 2017/18 OCT-SEP	2019/2020 OCT-SEP *1	2020/2021 OCT-SEP *1	2021 JAN-DEC *2	2020-21 OCT-SEP % CHANGE	2018-21 OCT-SEP % CHANGE	2018-21 JAN-DEC % CHANGE
EMPOWERED TO GROW							
Households covered by Child Labor Monitoring and Remediation System (CLMRS)	43,054	183,298	218,437	218,437	19%	407%	407%
Households monitored by CLMRS	26,965	73,651	45,247	50,256	-39%	68%	86%
Households monitored by CLMRS cumulatively	26,965	92,828	114,620	125,752	23%	325%	366%
Children identified in child labor	6,984	11,954	11,194	12,514	-6%	60%	79%
Children in the process of benefiting from remediation	3,277	8,413	8,199	9,456	-3%	150%	189%
Children benefiting from a type of remediation or preventative action	13,707	18,311	17,602	19,757	-4%	28%	44%
Children received education support	18,100	26,051	31,291	34,187	20%	73%	89%
Child labor cases remediated and resolved	488	2,341	3,984	4,776	70%	716%	879%
Birth certificates generated	651	2,244	429	429	-81%	-34%	-34%
Classrooms constructed/rehabilitated	93	114	102	102	-11%	10%	10%
School kits distributed	8,973	18,368	20,436	22,934	11%	128%	156%
Educational funds set up	9	9	9	9	0%	0%	0%
Village Savings and Loans (VSLAs) set up	39	687	1,367	1,367	99%	3,405%	3,405%
USD amount saved in VSLAs	144,484	1,200,000	1,506,498	1,506,498	26%	943%	943%
FOCUSED ON FARMERS							
Farmers trained in Good Agricultural Practices	117,645	149,279	171,824	174,330	15%	46%	48%
Cocoa seedlings distributed	4,787,401	3,148,096	2,895,417	2,882,917	-8%	-40%	-40%
USD in premiums paid to farmer groups	27,274,161	38,917,117	32,472,135	32,796,975	-17%	19%	20%
Hectares of land rehabilitated	4,122	5,521	7,310	11,187	32%	77%	171%
Kilogram per hectare cocoa yield of trained farmers	606	585	635	635	9%	5%	5%
Percentage of farmers in our supply chain earning a living income	N/A	N/A	7	7	N/A	N/A	N/A
Farm Development Plans (FDPs) generated on the Olam Farmer Information System (OFIS)	32,958	76,358	47,283	47,022	-38%	43%	43%
INVESTING IN NATURE							
Farmers in high-risk farmer groups trained on our Living Landscape Policies*3	79,171	88,747	77,841	77,896	-12%	-2%	-2%
Trees distributed for agroforestry & income diversification	381,755	733,183	1,745,058	1,784,871	138%	357%	368%
USD natural capital cost for agriculture, sequestration & transportation	1,144	1,191	873	873	-27%	-24%	-24%
GHG natural capital cost (USD per ton of finished product)	24	22	20	20	-11%	-19%	-17%
CO^2 emissions per metric ton of product output from processing	0.27	0.25	0.22	0.22	-11%	-19%	-19%
Percentage of suppliers mapped by the Forest Loss Risk Index (FLRI)	100	100	100	100	0%	0%	0%
Percentage of suppliers assessed to have no deforestation risk	81	80	79	100	-1%	-2%	23%

[1] The 2019/20 figures reported here differ slightly from those shared in our previous Cocoa Compass report due to an internal auditing process [2] Going forward, we will change our reporting period from crop year (CY Oct-Sep) to full year (FY Jan-Dec) which will allow us to better align with global sustainability frameworks. We have included both 2020/21 CY figures for comparison with our 2019/20 CY results, and 2021 FY for future comparison. [3] Our Living Landscapes policy adopts net-positive principles to put back more into food and farming systems than we take out.

THANK YOU TO OUR CUSTOMERS, PARTNERS AND SUPPORTERS

We are proud to supply leading multinationals and major chocolate confectionery businesses worldwide and to support their own sustainability ambitions.

Customers: Blommer Chocolate Company, Costco, Fazer, Ferrero, General Mills, Guittard, Läderach, Lindt & Sprüngli, Mars Inc, Mondelēz International, Nestlé, Orkla, Puratos, Ritter Sport, Starbucks, The Hershey Company.

Key partners, verifiers and certifiers: Anker Research Network, Bayer, Beyond Chocolate, Cocoa Research Institute Nigeria (CRIN), Le Comité National de Surveillance des Pires Formes des Travail des Enfants, Le Conseil du Café et Cacao, DISCO, L' Ecole Supérieure d'Agronomie de Côte d'Ivoire, European Cocoa Association, Fair Labor Association, Fairtrade, Fairtrade USA, Ghana COCOBOD, GISCO, GIZ, IDH-The Sustainable Trade Initiative, International Cocoa Initiative, International Finance Corporation, Intertek, Jacobs Foundation, Mitsubishi Corp, The Nature Conservancy, Organic, Partnerships for Forests, Rainforest Alliance, Save the Children, Scope Insight, Sustainable Food Lab, SWISSCO, Syngenta, World Cocoa Foundation, Wyatt Group.

About **ofi**
ofi (olam food ingredients) is a new operating group born out of Olam International. **ofi** offers sustainable, natural, value-added food products and ingredients so that consumers can enjoy the healthy and indulgent products they love. It consists of industry-leading businesses of cocoa, coffee, dairy, nuts, and spices. **ofi** has built a unique global value chain presence including its own farming operations, farm-gate origination, and manufacturing facilities. **ofi** partners with customers, leveraging its complementary and differentiated portfolio of 'on-trend' food products, to co-create solutions that anticipate and meet changing consumer preferences as demand increases for healthier food that's traceable and sustainable.

More information on **ofi** can be found at www.ofi.com. Follow @ofi-group on LinkedIn.

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