## COCOA LIFE 2021 CFI PROGRESS REPORT

8

TACKLING DEFORESTATION IN COCOA LANDSCAPES

Côte d'Ivoire, Ghana and Indonesia

Cocoa & Forests Initiative



Mondelēz



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## MOVING TOWARDS RESILIENT FORESTS FOR THE FUTURE OF COCOA



By Cedric van Cutsem, Senior Director Cocoa Life, Mondelēz International

Put simply, it's vital that we protect and restore indigenous forests — now and in the future — for the cocoa sector to be more sustainable.

Climate change remains the biggest challenge facing our planet, its people, as well as businesses — and the cocoa industry has a key role to play in tackling this issue by protecting the forests in cocoa regions together with relevant stakeholders.

It is an urgent matter as countries such as <u>Côte d'Ivoire</u> and <u>Ghana</u> lost 26% and 9.3% respectively of their humid primary forest between 2002 and 2020<sup>1</sup>. How can we protect and restore the rainforests in two of Africa's most biodiverse countries, as well as in other cocoa producing countries around the world?

Sustainability is key for Mondelēz (MDLZ) International. Back in 2015 at the United Nations Climate Change Conference in Paris (COP 21), MDLZ was the <u>first</u> <u>chocolate company to raise the issue of deforestation</u>. Two years later, MDLZ was proud to be a founding member of the Cocoa & Forests Initiative (CFI) and, in 2019, released <u>action plans</u> to end deforestation in the cocoa sector and restore forest areas — alongside



cocoa-producing countries of Côte d'Ivoire and Ghana, and the world's leading chocolate and cocoa companies.

A decade ago, MDLZ pioneered a disruptive approach to cocoa sustainability by launching the global cocoa sustainability program Cocoa Life, investing \$400 million USD over ten years to improve the livelihoods and living conditions of more than 200,000 cocoa farmers and about one million community members. And personally, having worked in the cocoa sector for over a decade across all issues including deforestation, sustainability, and climate change, I'm honoured to now be leading the Cocoa Life program, with a team of passionate and experienced colleagues.

Our work at Cocoa Life not only contributes to supporting farmers and fighting deforestation, but also delivers against MDLZ's 2050 net zero emissions target. However, we cannot — and must not — just focus on our own supply chain. The issues facing the cocoa sector are systemic: it is critical to adopt a sector-wide approach that recognizes the need for communication and participation between farmers, suppliers, manufacturers, NGOs, governments and other actors. Sparking collective action and a more integrated approach is therefore the mandate I set myself as industry co-champion for World Cocoa Foundation's (WCF) Healthy Planet pillar.

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This sector-wide approach is reflected across all Cocoa Life's developments: we test and pilot cutting-edge innovations, we take successful measures to scale, and we share our insights and impact data with program partners and the sector. As a sector, shared knowledge and joint actions are the only way to go further faster: which is the very reason that CFI was founded.

As well as physically protecting and restoring indigenous forests, it is imperative that we help farmers grow more on less land to reduce the pressure on forests. We engage and raise awareness with communities to help them understand the importance of forest protection and increase the likelihood that our programs will be adopted by them.

An example of the benefits of engaging communities is our 'Payment for Ecosystem Services' (PES) program, the first in the cocoa sector, which pays farmers a combination of financial & in kind incentives to plant non-cocoa trees. Covering a variety of arrangements for environmental services, from forest conservation to carbon sequestration, PES schemes reward those whose lands provide these services — and The World Wide Fund for Nature has stated the concept is, <u>"an innovative approach to nature</u> <u>conservation"</u>.

Together with the registered farmers, cocoa communities, governments and partners, we are proud of what we have achieved in driving cocoa forward from the start of Cocoa Life: 4,453,761 trees planted; 198,099 farms mapped across 310,413 hectares to prevent deforestation, which is the equivalent of almost 4 times the area of New York City.

These are important figures showing that positive change is happening. But even more important is sharing the knowledge behind them so we can drive further, faster progress across the whole of the cocoa sector. Only by working together can we help cocoa farmers and communities build resilience to climate change.



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## **OVERVIEW OF OUR CFI ACTIONS & PROGRESS**

Two specific milestones have been key in MDLZ's journey towards a more sustainable future. In 2015, at COP21 in Paris, MDLZ became the first company to raise the issue of deforestation in the cocoa industry.

Two years later in 2017, MDLZ became a founding member of the CFI. Consequently, in November that year, MDLZ, the governments of Côte d'Ivoire and Ghana, along with other leading chocolate and cocoa companies signed the Cocoa & Forests Initiative Frameworks for Action. This set ambitious goals for 2022 to eliminate deforestation in the West African cocoa supply chain.

This year, Cocoa Life's CFI Progress Report shares the progress made, as well as the challenges faced between October 2020 and September 2021. The focus is the two CFI countries of Ghana and Côte d'Ivoire, as well as going beyond the initial commitment to report progress on the Cocoa Life program in Indonesia.

COVID-19 restrictions continued to be a challenge. Nevertheless, through innovations, ambitious partnerships, landscape approaches and being constantly guided by – and sharing – learnings from impact measurement and pilots, the program has been scaled up.

## GLOBALLY, TWO CONSISTENT AREAS OF ACTION EMERGED THIS YEAR:

- SHAPING THE LANDSCAPES WHERE COCOA GROWS THROUGH INNOVATION
- SCALING UP INITIATIVES AND CLIMATE-SMART PRACTICES WITH PROMISING IMPACT

Our hope is that this report acts as a call for even more ambitious partnerships and collective action across cocoa and beyond. Our goal is to help eliminating deforestation, maintaining cocoa ecosystems, and protecting the land and the forests – it's our promise to future generations. But we cannot achieve this alone.

Cocoa Life's three-pillared integrated approach to forest protection and reforestation are 'Protect', 'Produce' and 'People', which aligns", which aligns closely with CFI<sup>2</sup>. The data table at the end of this report shares the progress we have made against goals for each of these pillars.





Looking at the period from October 2020 to September 2021, highlights from across Ghana and Côte d'Ivoire include:

## PILLAR 1: FOREST PROTECTION & RESTORATION





in Ghana are also polygon mapped.



TRAINED 42,962 FARMERS

on forest policy, forest protection, and restoration in Ghana and Côte d'Ivoire.

### Registered 1,980 FARMERS

with Payments for Environmental Services (PES).

MAPPED 105,046 FARMS across Ghana and Côte d'Ivoire.

### PILLAR 2: MORE SUSTAINABLE PRODUCTION & FARMERS' LIVELIHOODS

### Trained a total of 93,899 FARMERS



in Good Agricultural Practices across Ghana and Côte d'Ivoire, and 44,774 in Indonesia.



community members participating in additional Income Generating Activities (IGA's) in Ghana and Côte d'Ivoire.

Distributed **1,232,735** MULTIPURPOSE TREES

for on-tarm planting across Ghana and Côte d'Ivoire, and 149,052 in Indonesia.

## PILLAR 3: COMMUNITY ENGAGEMENT & SOCIAL INCLUSION

## FACILITATED 132,171 COMMUNITY MEMBERS

#### COMMUNITY MEMBERS PARTICIPATING IN WOMEN'S EMPOWERMENT PROJECTS

and activities in Ghana and Côte d'Ivoire. 69% of participants were women, while 37% were men, showing our commitment to including men in our diversity and inclusion activities.



Facilitated **YOUTH FOCUSED PROJECTS** and activities, attended by 8,500 community members in Ghana and Côte d'Ivoire.

This progress means that we have mapped a total of **105,046** farms and distributed **2,935,936** trees for on-farm and off-farm planting in Ghana and Côte d'Ivoire as part of our CFI commitment since 2018.

Across all Cocoa Life cocoa-growing countries, we have distributed **4,453,761** trees, mapped **198,099** farms and trained **208,840** farmers in Good Agricultural Practices since 2012.

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#### HIGHLIGHTS FROM 2021:

## SHAPING THE LANDSCAPES WHERE COCOA GROWS

Forests help stabilise the climate: they regulate ecosystems, protect biodiversity, support livelihoods, and can help drive sustainable growth. And they play an integral part in the carbon cycle.

Across all the sustainability innovations being implemented by Cocoa Life, it is crucial to be able to measure the consequences of our actions. After all, it is only by measuring that we can understand the impact we have and this is key when it comes to our carbon footprint.

MDLZ has not only been working with the carbon consultancy <u>South Pole</u>, but has also partnered with the sustainability consulting group, Quantis and the Agritech company, Satelligence. Both provide revolutionary new ways for Cocoa Life to calculate the carbon impact of our programs.

Satelligence is working with MDLZ's cocoa supply chain across West Africa and Indonesia to measure the historical deforestation and carbon stocks across its farms and sourcing landscapes. Our work together also looks at the current deforestation risk per farm and surrounding area. This information is important for MDLZ and other companies because it identifies trends and hotspots for forest and carbon loss to prioritize engagement in protecting and restoring forests. With farm-level forest loss risk information, these farmers can be proactively engaged to prevent future deforestation and design forest conservation programs where they are needed most.

The deforestation and carbon data will be used for measuring the carbon footprint of MDLZ cocoa and inform progress towards their science-based target and have an improved understanding of their scope 3 emissions



from land use change. Going forward, the monitoring of carbon reduction and removals on and around cocoa farms will allow MDLZ and the cocoa industry to measure progress and the climate benefits from agroforestry and community-level reforestation.

The cocoa sector is embracing satellite monitoring for reducing deforestation. Companies need to embrace satellite data to develop landscape-level collaborative strategies to restore cocoa-forest landscapes with agroforestry and other restoration. This enables to measure improvements in landscape connectivity as well as carbon increases to deliver carbon payments to cocoa farmers at scale. Foreword 🚺 Overview

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Through its work, Cocoa Life has contributed to MDLZ reducing its GHG emissions. As **Chris McGrath**, SVP & Chief Impact & Sustainability Officer at Mondelēz International says:

MONDELĒZ INTERNATIONAL'S TARGET IS TO ACHIEVE NET ZERO GREENHOUSE GAS EMISSIONS ACROSS SCOPES 1, 2 AND 3 BY 2050. COCOA LIFE'S WORK TO PROTECT AND RESTORE FORESTS IN COCOA REGIONS IS CRITICAL TO HELP REDUCE OUR OVERALL CARBON FOOTPRINT. CREATING RESILIENT FORESTS TO GROW COCOA IS ESSENTIAL TO PROTECTING THE LIVELIHOODS OF COCOA FARMERS AND THE FUTURE VIABILITY OF THE COCOA INDUSTRY."

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### **OUR LANDSCAPE INITIATIVES**

For good reason, landscape approaches have gained prominence in the search for solutions to reconcile conservation and development. A 'landscape approach' was defined by The Center for International Forestry Research as, "<u>Managing complex landscapes in an integrated, holistic</u> <u>fashion, incorporating all the different land uses within the</u> <u>landscape into a single management process</u>".

Historically, there's been a pattern of segregating functions within indigenous landscapes. There might be a conservation concession and a separate community concession that are both interconnected by the people and the land, but they have been managed in isolation. A holistic landscape approach is needed to understand the interconnections between the different land uses, to capture the complexity of these uses and to ensure that management is integrated and simplified — often in a way that hasn't been done before. This approach is crucial if we are to drive change in farming communities and the environment on a large scale.

Hence, this year, Cocoa Life has continued to build ambitious and innovative landscape approaches with suppliers, NGO partners, peers and local authorities that connect forest conservation to people's livelihoods. In Ghana, Cocoa Life was an active founding member of the 'Landscapes Initiative in the Asunafo Region'. Part of the forest belt of Ghana, the Asunafo-Asutifi landscape is a complex environment.

This area has been identified as one of six priorities <u>Hotspot</u> <u>Intervention</u> Areas by the Ghana Forestry Commission, as part of its emission reduction program. As part of the Landscape Initiative, Cocoa Life is dedicating education and training resources to address the issues of deforestation, low productivity, and farm encroachments into forest reserves, while improving the livelihood of cocoa farmers.



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### PAYMENTS FOR ENVIRONMENTAL SERVICES (PES)

As the first chocolate company to introduce a PES scheme, we have long championed its effectiveness. Farmers are paid to engage in forest-friendly practices such as replanting trees. The PES scheme was piloted with Cocoa Life communities in the Nawa region in Côte d'Ivoire, and since then we have introduced it to other countries. Among them, it is now part of the wider reforestation initiative in Ghana, where deforestation and forest degradation have been increasing since the 19th century.

DIALOGUE WITH COCOA FARMERS IS CRUCIAL TO THE COCOA LIFE PROGRAM. WITHOUT UNDERSTANDING THE REAL CHALLENGES THEY FACE; WE CANNOT TRULY SCALE IMPACT ON THE BIG ISSUES OF DEFORESTATION OR CLIMATE CHANGE. OUR PIONEERING PES SCHEME IS JUST ONE EXAMPLE OF WHAT THIS COMMUNICATION CAN ACHIEVE TO BRIDGE THE NEEDS OF THE FOREST WITH THE NEEDS OF COCOA FARMING COMMUNITIES."

#### Cathy Pieters,

Vice President Global Sustainable Ingredients at Mondelēz International

#### **PES IN GHANA**

In 2002, the government of Ghana, through the Forestry Commission, reviewed the Taungya practice, relaunching it as the Modified Taungya System (MTS). The new approach took into account financial benefits for farmers and other stakeholders involved and transferred ownership of the trees from a single entity (the government) to multiple owners (farmers, local communities, government and landowners).

Today, MTS sees communities assigned areas of degraded forest to plant new tree seedlings which help reforestation — while adding food crops until the tree canopy closes. Cocoa Life provides farmers with seedlings, tools and labour, enabling them to diversify and ultimately increase the household income. Food crops grown can be used by farmers to feed their households or as a source of income. A 40% share of timber revenues go to the farmers, with the remaining 60% split between the Forestry Commission and the traditional village leaders. A win-win practice for forestry and adaptation to climate change mitigation.

To date, 80% of those receiving the MTS training have been women. It is often challenging for women to access land in the community and hence the interest in volunteering to take care of the degraded forest land, making women more likely to adopt long-term thinking and sustainability practices. Similarly, Cocoa Life's Village Savings and Loan Associations (VSLA) in Ghana allow women to pool their savings, build reserve funds for



emergencies and provide finance for small projects, helping both the community and forest protection efforts.

Landscape management for cocoa livelihoods is key, and the basis of another key Cocoa Life partnership with Beyond Chocolate<sup>3</sup>, Olam, The International Center for Tropical Agriculture and the non-profit The Sustainable Food Lab. This project uses remote sensing and modelling approaches to categorise landscapes into priority cocoa intensification and conservation zones and has introduced a PES model for community-led forest conservation. The project began with a search to find a highly motivated community with a genuine interest in conservation (four forest fringe villages were filtered out before finding one that fitted the criteria). A key learning here was that PES alone is not enough to motivate some communities that see the forests as one of few options to achieve food security; land tenure and tree rights among others have role to play.

THE MODIFIED TAUNGYA SYSTEM (MTS) APPROACH AT AYUM FOREST RESERVE (ASUNAFO NORTH) HAS DEMONSTRATED THAT WELL THOUGHT OUT AGROFORESTRY SOLUTIONS DO NOT ONLY PROVIDE AN AVENUE TO INITIATE ACTIONS THAT HELP RESTORE DEGRADED FOREST LANDSCAPES BUT ALSO CREATE OPPORTUNITIES TO ENHANCE LIVELIHOODS, ESPECIALLY FOR WOMEN, WHO WOULD NOT HAVE HAD ACCESS TO PRIME LANDS DUE TO EXISTING LAND TENURE ARRANGEMENTS."

**Angela Lusigi,** UNDP Resident Representative in Ghana.





#### CASE STUDY from Ghana

Grace Botwe lives in Akwaduro, in the Asunafo North Municipal in the Ahafo Region of Ghana and has been cocoa farming for more than 30 years. Over three decades, she witnessed how illegal human activities, such as bush burning and logging, reduced the Ayum Forest Reserve to a shell of its former self.

Today, Grace is one of 200 farmers working on our partnership with the United Nations Development Program, Cocobod, and the Forestry Commission of Ghana to restore the forest using the Modified Taungya System. As Grace explains, "The forest restoration initiative has given us access to food all year round. When cocoa is out of season, we rely on our plantain and vegetable harvest." And the initiative is bringing new business to the village. Dora Ansah, a market trader in the town of Kumasi, drives for over three hours to purchase plantain from the farmers: "We usually make a profit because we are buying straight from the farms. And the plantains and cocoyams we buy from here are always fresh".



#### PES IN CÔTE D'IVOIRE

The second-most populous region in Côte d'Ivoire, the Nawa Region is one of the main cocoa supply zones in the world and has faced dramatic deforestation over the last three decades. Partnering with the Ministry of Environment and Sustainable Development and local NGOs, Cocoa Life introduced the first 'Payment For Ecosystem Services'. The project began with the involvement of 2,072 ha of agroforestry, with over 150,000 trees planted by women alone, and farmers are already starting to see the benefits.

Following this pilot, we developed a new partnership with Barry Callebaut and Impactum allowing this project to expand to the nearby Gabiadji region. Over three years, our ambition is to introduce climate-smart Cocoa practices to two co-operatives and 600 farmers, signing 720 PES contracts and planting 150,000 seedlings. One challenge we have faced is that a lack of identity cards means PES e-payment does not suit all beneficiaries. However, our partner Impactum is working with mobile banking service providers to process PES cash payments.

Separately, in Côte d'Ivoire, we have begun an innovative PES partnership with the UK Government's Partnerships for Forests (P4F) initiative. A grant from P4F is supported by long-term and transparent commitments from Cocoa Life to deliver measurable results: this will enable us to scale up the PES program across the whole San Pedro region around the Tai National Park. Roll out will include the planting of 242,000 forest trees and the development of Local Sustainable Land Use Plans. Our ambition is to implement agroforestry practices across 1,200 ha of cocoa farms, develop about 10,000ha of agroforestry, restore 200ha of degraded land and conserve 300ha of native community forests.

#### PES IN INDONESIA

The Indonesian region is highly vulnerable to climate change impacts, including extreme events such as floods and droughts, long-term changes from sea level rise, shifts in rainfall patterns and increasing temperature. Cocoa Life's forest projects focus on the South Sulawesi and South-East Sulawesi provinces, which account for 75% of national cocoa production. Our ambitious plans include the introduction of a more sustainable agroforestry farming system.

Often cocoa is grown in monocultures in what is known as the 'full-sun system', requiring the removal of all surrounding trees. But as global temperatures rise, the lack of shade trees exposes the cocoa plants to the increasingly fierce heat of the sun, damaging crops, leaving the farmers with little option but to deforest new areas in order to protect yields. Through a Cocoa Life landscape partnership with PUR Projet, our suppliers Barry Callebaut and Ofi, and farmers of Sulawesi, we are working to develop shaded agriculture systems – a sustainable practice, which creates more shade on the farms for better productivity. Through the project, farmers can access non-cocoa seedlings, including fruit trees to grow as shade trees.

In 2021, 64,413 on-farm shade trees were distributed and planted for 2,550 farmers, bringing the total number of South Sulawesi and South-East Sulawesi farmers adopting agroforestry to 14,406. The trees not only create suitable microclimate for cocoa to increase productivity, but the trees produce fruit or timber to become an alternative income for farmers. The ambition is to distribute 494,000 trees during the next five years.



#### **CASE STUDY** from Indonesia

Engaging the women of South Sulawesi has been key. As Hijerah, 32, from Konaweha village stated, "We usually know better than our husbands about the money and economic potential of trees, therefore women hold the power to decide the species to be planted in our farm." She added, "I am happy to be involved in the program. I learned that fruit trees are not only good for harvest, but also good for our farm and the environment and chose the species we want to plant."

#### CABI'S BIOPROTECTION PORTAL

Last year saw the launch of CABI's BioProtection Portal, which MDLZ's cocoa R&D team is proud to contribute to.

CABI (or the Centre for Agriculture and Bioscience International) is an international, inter-governmental, not-for-profit organization established by a United Nations treaty-level agreement.

The pioneering <u>BioProtection Portal</u> aims to increase the uptake amongst farmers of biological controls and biopesticides, which has been slower than it should be. After all, compared to synthetic pesticides, biological pesticides have huge advantages: they're safe, less toxic for the environment and not harmful to human, plant, bird and animal life.

However, a key problem was in the difficulty farmers faced in finding a registered biological control product. The CABI BioProtection Portal addresses this by providing a holistic database via a free, web-based tool that enables users to discover information about registered biocontrol and biopesticide products around the world. This will ultimately help growers to identify, source and correctly apply biocontrol and biopesticide products against problematic pests in their crops. The portal can be accessed on multiple devices, putting this valuable information at the fingertips of anyone who needs it. Foreword Overview

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#### **HIGHLIGHTS FROM 2021:**

## SCALING UP INITIATIVES AND CLIMATE-SMART PRACTICES WITH PROMISING IMPACT

We continue to scale up the size of our program on the ground, now reaching 182,351 farmers registered with Cocoa Life across Ghana, Côte d'Ivoire and Indonesia – increasing from 160,841 farmers reached by the end of 2020. In the CFI reporting season October 2020 to September 21, we planted 1,960,088 trees across Ghana and Cote d'Ivoire, and 213,465 trees on- and off-farm in Indonesia, bringing the total to 4,453,761 across Cocoa Life by the end of 2021. We mapped 198,099 farms in total across Cocoa Life by the end of 2021.

#### TARGETING GOOD AGRICULTURAL PRACTICES

One of the key fundamentals to the success of the Cocoa Life program is providing farmers with training in Good Agricultural Practices (GAP), aiming to promote productivity and discourage farming in protected forests. Put simply, we train farmers to help them grow more cocoa on less land. We have trained an additional 93,899 farmers in Good Agricultural Practices across Ghana and Côte d'Ivoire from October 2020 to September 2021, and 44,774 in Indonesia in 2021.

The Targeted Good Agricultural Practices project has continued into its 3<sup>rd</sup> year. Our aim is to increase cocoa production by providing finance and services to enhance farms' performance. For example, applying fertilizer to a farm's soil, pruning and pest & diseases control. These services are delivered by one of our sustainability partners, ofi, a global leader in naturally good food & beverage ingredients. Farmers are provided with credit to cover input and labour costs which is recovered at harvest time. We couldn't have achieved these numbers without the invaluable actions of numerous women across all of the communities involved. across all of the communities involved. The impacts of their increased involvement in climate initiatives will continue to amplify our progress on the environment such as through tree nurseries in NAWA region or MTS which is explained later.



A new partner, Alliance Bioversity-CIAT was added in 2021 to support project management, data collection, and analysis for this final year of the project. Additionally, Alliance Bioversity-CIAT deployed one independent field agronomist to monitor activities and supervise data collection using digital data collecting tools.

Yield results look very promising. We will continue to collect harvest data until September 2022 when final analysis and a recommendation will be made. We will discuss with stakeholders what and how to take the findings to scale.

#### FARM MAPPING AND TRACEABILITY

As Cocoa Life continues to work with more and more farmers, farm mapping and cocoa traceability continues to be crucial: unless we understand where (and under which conditions) cocoa is produced, we cannot identify areas to help stop deforestation. Farm mapping is vital in identifying problem areas and allowing us to take action where it is most needed. As new farmers and co-operatives join the Cocoa Life program each year, mapping progresses, often requiring collaboration with agents across individual farms in hardto-reach areas.

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We have mapped 41,154 farms in Côte d'Ivoire, 63,892 farms in Ghana and 34,424 farms in Indonesia during this report's time frame. In total, we have mapped 198,099 Cocoa Life registered farms by the end of 2021.

#### THE COCOA LIFE IRRIGATION PROJECT IN GHANA

Irrigation systems on individual cocoa farms in Ghana are rare, so a new Cocoa Life project has been launched to introduce irrigation to our cocoa farmers, as part of the effort to promote mechanisation.



Having access to water all year round via irrigation means agronomic practices can reliably be planned to ensure high productivity in both the major and minor seasons. This enhanced productivity contributes to improving income, which in turn helps farmers achieve a decent quality of life. High yield by individual farmers will transform into high national cocoa volumes with positive foreign exchange earnings by the country and impact the cocoa's contribution to the gross domestic product (GDP).

Over the past year, Cocoa Life has installed solar-powered drip irrigations across five farms, all of one hectare each. The irrigation systems have the potential to drastically reduce the cost of farm running and maintenance. Capacity can be enhanced at any time to extend the farm's water coverage, and the use of renewable energy makes this system more environmentally friendly.

However, the initial cost of installation is too expensive for the average small-holder cocoa farmer to invest in. For this reason, we need to target more advanced farmers. Cocoa Life will continue to assess other potential funding sources to expand the scope of this project, but in the meantime, we work towards cocoa farmers embracing the technology and subsequently fund the scale up. Our R&D team is collecting data from participating farms to develop the business model and advise farmers on potential returns on investment. Foreword

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#### PLANTING FUTURE RAINFORESTS AND **DIVERSIFYING FARM TREES**

We continue to encourage the use and planting of shade trees for their carbon capture, economic and cocoa growing benefits.

This year, Cocoa Life's PES partnerships have enabled us to broaden our efforts, allowing us to distribute 1,960,088 shade trees across Ghana and Côte d'Ivoire from October 2020 to September 2021, and 149,052 in Indonesia in 2021. Our South Pole partnership has helped us understand the impact of this tree planting.

In Ghana, it was the second year we have been able to plant trees off-farms and in forests to contribute to reforestation efforts in places like the Ayum Forest Reserve in Ghana. Here specifically, in the adjoining fringe communities of Anwianwia and Akwaduro in this forest reserve, 243 farmers (comprising 99 male and 144 female farmers) and their families have participated in the MTS scheme, planted 184,500 economic tree canopy seedlings alongside major food crops across 170 ha.

And in Côte d'Ivoire, we planted 738,910 multi-purpose trees on farms last year and another 542,853 were planted off farms. Here, we are working with STAG, a local professional nursery company, to build 10 nurseries with a total capacity of 1.2 million seedlings by 2022. In addition, we are working with Village Savings and Loans Groups to help establish these nurseries and sell the seedlings. This provides those running the nurseries, many of whom are women, an additional source of income. To date, our nurseries hold up to 1,927,000 seedlings.

In Indonesia, the landscape within cocoa-growing communities can be very varied. The Kolaka district in particular has a diverse range of cocoa farms, so - as covered earlier - we worked with PUR Project to teach farmers about the various planting models and the best agroforestry techniques to integrate shade trees to their farms. To grow seedlings for planting on and off farm, we've established community nurseries.

#### EMPOWERING FEMALE FARMERS

Empowering women is not only the right thing to do, it also drives positive impact for communities and creates a business advantage. When women have control over their own income, they reinvest in their families, children, and communities, increasing the well-being and the sustainability of cocoa-growing communities<sup>4</sup>. Supporting women has always been a cross cutting feature of the Cocoa Life program, where we believe there is huge potential to make even greater changes. One fundamental activity are VSLAs, which allow women to pool their savings, build reserve funds for emergencies and provide finance for small projects and additional businesses. VSLAs are a core tool for encouraging financial empowerment — and during this reporting period we had 2,546 VSLAs in action across Ghana and Côte d'Ivoire, with an additional 1,304 operational in Indonesia by the end of 2021.

In addition, we're now seeing the emergence of 'Green VSLAs' led by women who spark environmental protection initiatives, which can increase incomes and allow women to become community champions.



#### CASE STUDY from Côte d'Ivoire

An example is our clean cookstoves project in Côte d'Ivoire. Through a partnership with CARE International and Solidaridad, with funding from the MDLZ Sustainable Futures initiative, 4,000 sustainable cookstoves will be installed over three years.

These cookstoves decrease household air pollution, promote healthier homes, reduce carbon emissions by reducing the demand for wood for burning, and provide an income for the women we are training to install them. This project is the first of its kind in Côte d'Ivoire producing delivery certified carbon.





#### LOOKING TO THE FUTURE:

## **A LANDSCAPE OF POSSIBILITIES**

#### By Cedric van Cutsem,

Senior Director Cocoa Life, Mondelēz International

A decade ago, MDLZ pioneered a new approach to cocoa sustainability by launching the Cocoa Life program. Back then, the focus was on building stronger supply chains, working with cocoa farmers to build resilient businesses and empowering all members of cocoa-growing communities while protecting the environment.

However, as Cocoa Life teams began work on the ground alongside our experts and partners, it became clear that we should also focus on deforestation.

Today, Cocoa Life's ambition is to elevate the lives of women and men in cocoa communities and to shape cocoa landscapes together. Tackling deforestation is not only critical to achieving this, but also connects to many of Cocoa Life's other ambitions from supporting farmers to increase productivity and incomes to empowering all members of local communities.

Now, as Cocoa Life moves into its second decade, our commitment to fulfilling bold ambitions remains as strong as ever. We aim to integrate agroforestry even more closely into our sustainability program in order to protect and restore indigenous rainforests in cocoa regions. We hope to continue building up the resilience of cocoa farming communities to climate change. Our aspire to strengthen our efforts to protect and restore forests and reduce the pressure on these landscapes by helping cocoa farmers grow more on less land.

We intend to continue supporting communities across Ghana, Côte d'Ivoire, Indonesia and beyond, as they strive to protect their forests, particularly through working with emerging women leaders.

We will seek to advocate for collective action and a more integrated approach. And, if we are truly to succeed in making systematic, long-lasting changes, we need to collaborate. We need to work together from the ground upwards and be transparent about what works — and what doesn't.

We invite our readers to reach out if they see opportunities for us to improve our approach. Only through dialogue and sharing experiences we will transform the sector. We call on all our industry partners and all CFI signatories to look beyond their own supply chains to collectively scale solutions together in a more impactful way. Only together can we implement the urgent changes needed to tackle deforestation. Only together can we build a fair and sustainable cocoa industry. And only together can we move cocoa forward.

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## THE COCOA AND FOREST INITIATIVE

## COLLECTIVE ACTION TO END COCOA-RELATED DEFORESTATION

The governments of Côte d'Ivoire and Ghana and 35 leading cocoa and chocolate companies, representing 85% of global cocoa usage, joined together in the <u>Cocoa</u> <u>& Forests Initiative</u> to end deforestation and restore forest areas. Their combined actions play a crucial role in sequestering carbon stocks in West African forests and addressing climate change, in line with the Paris Climate Agreement. The Cocoa & Forests Initiative delivers on Sustainable Development Goal 13 (Climate Action) and 15 (Life on Land).

The Cocoa & Forests Initiative is a public private partnership based on frameworks for action (<u>Côte d'Ivoire</u> and <u>Ghana</u>) and action plans for the private sector (<u>Côte d'Ivoire</u> and <u>Ghana</u>) and public sector (<u>Côte d'Ivoire</u> and <u>Ghana</u>) that spell out commitments to:

- Protect and restore forests,
- **Promote** sustainable cocoa production and farmers' livelihoods,
- Engage communities and boost social inclusion.

To learn more, follow #CocoaAndForests on social media, or visit <u>CocoaAndForests.org</u> and <u>WorldCocoa.org</u>.

The <u>World Cocca Foundation</u> (WCF); <u>IDH</u>, the Sustainable <u>Trade Initiative</u>; and the Governments of Côte d'Ivoire and Ghana drive the Cocca & Forests Initiative. The Prince of Wales launched the Initiative in March 2017 and reviewed implementation progress in November 2018.

Deforestation of tropical rainforests is a major issue in Côte d'Ivoire and Ghana, which together produce nearly twothirds of the world's supply of cocoa, the main ingredient in chocolate. <u>Côte d'Ivoire</u> and <u>Ghana</u> respectively lost 26% and 9.3% of their humid primary forest between 2002 and 2020, with a significant portion of deforestation attributable to cocoa farming expansion.

Cocoa provides crucial income to communities in rural West Africa, but farmers are too often faced with poverty. Poverty is one of the causes of deforestation. Accelerating a transition to sustainable livelihoods is essential for farmers' economic security and a healthy planet.

In 2020, WCF worked with CFI companies, governments, and technical experts to review and refine CFI indicators and definitions to improve alignment, accuracy of reporting, and to ensure what is reported reflects a meaningful result on the ground and that the data can be used to monitor and guide the delivery of interventions. As part of this review, some indicators were removed because they were redundant and process oriented. In other cases, the wording and/or definitions were adjusted to improve clarity, accuracy, and consistency.



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#### CFI PILLAR ONE: FOREST PROTECTION AND RESTORATION

The first priority is the protection and restoration of forests that have been degraded. To this end, the governments and companies have pledged no further conversion of forest land for cocoa production and have committed to the phased elimination of illegal cocoa production and sourcing in protected areas.

Both countries are introducing a differentiated approach for improved management of forest reserves, based on the level of degradation of forests. In 2019, the government of Côte d'Ivoire adopted and published a new forest code which, among other things, put forth policies for the promotion of cocoa agroforestry to restore degraded land, improve forest cover, and promote sustainable livelihoods and agriculture in the classified forests and rural zones. Both governments have shared maps on forest cover and land-use, and continue to update the maps, including socio-economic data on cocoa farmers, to inform private sector investments. To ensure effective implementation and monitoring of these commitments, companies have pledged to develop traceability from farm to the first purchase point for their own purchases of cocoa. They also work with governments to ensure an effective national framework for traceability encompassing all traders in the supply chain and to anticipate forthcoming due diligence legislation. The companies will similarly share information with the national satellite monitoring platforms (in development) to effectively monitor progress on CFI, as well as proactively address threats of new deforestation.

Protecting the environment and tackling climate change has been a key focus within our holistic approach from the start. To source cocoa more sustainably, we work with our farmers and cocoa communities to integrate a landscape approach to forest protection and restoration, to encourage critical farmer behaviour change around deforestation.

We have:

 67% (Côte d'Ivoire) and 79% (Ghana) of directly sourced cocoa traceable from the farm to the first purchase point

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#### CFI PILLAR TWO: SUSTAINABLE PRODUCTION AND FARMER'S LIVELIHOODS

The next critical priority is more sustainable agricultural production and increased farmer incomes. These are essential pre-requisites for reducing pressure for agricultural encroachment into forests and strengthening the resilience of cocoa farmers to climate change.

The governments and companies are accelerating investment in long-term productivity of cocoa in order to grow "more cocoa on less land." Key actions include provision of improved planting materials, training in good agricultural practices, soil fertility, land tenure reform, and capacity building of farmers' organizations. More sustainable livelihoods and income diversification for cocoa farmers are being accelerated through food crop diversification, agricultural inter-cropping, and development of mixed agroforestry systems and shade-grown cocoa. At Cocoa Life, we work to make cocoa farming a more sustainable business, and know that alongside creating empowered cocoa communities and protecting and restoring the forests, we have a role to play in supporting the farmers who grow our cocoa in building more sustainable livelihoods.

We have:

- **Trained 93,899** farmers in Good Agricultural Practices across Ghana and Côte d'Ivoire from October 2020 to September 2021, and 44,774 in Indonesia in 2021.
- Facilitated 66,892 community members participating in additional Income Generating Activities (IGA's) in Ghana and Côte d'Ivoire from October 2020 to September 2021.
- Distributed 1,232,735 multipurpose trees for on-farm planting across Ghana and Côte d'Ivoire from October 2020 to September 2021, and 64,413 in Indonesia in 2021.



#### CFI PILLAR THREE COMMUNITY ENGAGEMENT AND SOCIAL INCLUSION

The final area of focus is strong community engagement and social inclusion, with a particular focus on women and youth. The governments and companies have committed to consultation and participation of cocoa farmers in the design and implementation of key actions, and promotion of community-based management models for forest protection and restoration. The governments have adopted social and environmental safeguards and are assessing and mitigating the social impacts and risks of any proposed land-use changes on affected communities. Deforestation can't be addressed through cocoa farmers alone; we need to involve the wider community. We know that engaged and informed communities are empowered to lead their own development. Through VSLAs and trainings, we up-skill members so they feel empowered to voice their opinions and are equipped with the tools to address issues and change the shape of their community.

#### We have:

- Facilitated **132,171** community members participating in women's empowerment projects and activities in Ghana and Côte d'Ivoire from October 2020 to September 2021. 69% of participants were women, while 37% were men, showing our commitment to including men in our diversity and inclusion activities.
- Facilitated youth focused projects and activities, attended by 8,500 community members in Ghana and Côte d'Ivoire, from October 2020 to September 2021.

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## **MDLZ CFI PROGRESS TRACKING TABLE**

GHANA Indicator	2022 Goal <sup>1</sup>	# Through direct investment <sup>2</sup> (October 2020 to September 2021)	# Through direct investment <sup>3</sup> (Since 2018)
FOREST PROTECTION AND RESTORATION			
# of cocoa plots mapped in direct supply chain	60,000	133,535	
# of farms mapped in direct supply chain	45,000	63,892	
# of hectares in the direct supply chain with deforestation risk assessments completed	279,000	110,321	506,200
% of directly sourced cocoa traceable from the farm to the first purchase point	100%	79%	
# hectares restored in Forest Reserve / Forêts Classée	350	213	383
# trees registered			50,924
# of farmers with land tenure agreements/documentation obtained via company support			
# farmers informed, trained, and / or consulted on the new Forest Code, law enforcement, forest protection, and restoration	33,750	11,350	
# individuals receiving PES: New	0	243	1,233
# individuals receiving PES: Total Active	10,000	243	
# farmers applying agroforestry	15,000	25,207	36,930
# multi-purpose trees distributed for on-farm planting	500,000	493,825	928,922
# hectares cocoa agroforestry in development	7,245	36,131	63,325
# of trees distributed for off-farm planting	25,000	184,500	344,500
# hectares of forest area restored off-reserve / in rural zone			170
# farmers trained in CSC best practices	45,000	36,170	
# of farmers trained in Modified Taungya System (MTS)	1,500	243	
\$ contributed to fund			
SUSTAINABLE PRODUCTION AND FARMERS' LIVELIH	OOD		
# improved cocoa seedlings distributed to farmers	12,500,000	2,179,226	8,131,645
# of farmers reached by GAP training programs	45,000	66,569	
# individuals participating in additional Income Generating Activities (IGA's)	45,000	43,755	
# of individuals in the current reporting year enrolled in a formal financial products and services with support from companies	31,500	9,565	
# of members of VSLA groups in the current year	31,500	39,440	
# of VSLA groups in the current year	1,150	1,454	2,516
SOCIAL INCLUSION AND COMMUNITY			
# of cocoa communities with active forest restoration and protection program (CBNRM)	450	12	585
# hectares under CBNRM			56,134
# of individuals participating in women's empowerment projects and activities	30,000	32,636	
# of individuals participating in youth focused projects and activities (15-35 years old)	600	8,411	

<sup>1</sup> By September 31, 2022

<sup>2</sup> As a manufacturing company, MDLZ only invests directly in CFI-related activities.
<sup>3</sup> Progress from January 2018 to September 2021

## MDLZ CFI PROGRESS TRACKING TABLE

MULZ UFI PRUGREGG IRAUNING IABLE		# Through direct	# Through
CÔTE D'IVOIRE	2022	investment <sup>2</sup> (October	direct investment <sup>3</sup>
Indicator	Goal <sup>1</sup>	2020 to September 2021)	(Since 2018)
FOREST PROTECTION AND RESTORATION			
# of cocoa plots mapped in direct supply chain	96,000	52,372	
# of farms mapped in direct supply chain	72,000	41,154	
# of hectares in the direct supply chain with deforestation risk assessments completed	787,500	112,000	678,180
% of directly sourced cocoa traceable from the farm to the first purchase point	100%	67%	
# hectares restored in Forest Reserve / Forêts Classée		479	479
# trees registered			
# of farmers with land tenure agreements/documentation obtained via company support		0	0
# farmers informed, trained, and / or consulted on the new Forest Code, law enforcement, forest protection, and restoration	72,000	31,612	
# individuals receiving PES: New	0	128	1,737
# individuals receiving PES: Total Active	20,000	1,737	
# farmers applying agroforestry		3,222	3,222
# multi-purpose trees distributed for on-farm planting	1,500,000	738,910	1,071,598
# hectares cocoa agroforestry in development	21,739	21,365	30,870
# of trees distributed for off-farm planting	2,500,000	542,853	590,916
# hectares of forest area restored off-reserve / in rural zone	2,500	309	363
# farmers trained in CSC best practices	72,000	7,679	
# of farmers trained in Modified Taungya System (MTS)			
\$ contributed to fund			
SUSTAINABLE PRODUCTION AND FARMERS' LIVELIHO	DOD		
# improved cocoa seedlings distributed to farmers			
# of farmers reached by GAP training programs	72,000	27,330	
# individuals participating in additional Income Generating Activities (IGA's)	72,000	23,137	
# of individuals in the current reporting year enrolled in a formal financial products and services with support from companies	18,000	6,724	
# of members of VSLA groups in the current year	72,000	22,887	
# of VSLA groups in the current year		1,092	2,036
SOCIAL INCLUSION AND COMMUNITY			
# of cocoa communities with active forest restoration and protection program (CBNRM)	800	44	88
# hectares under CBNRM			80
# of individuals participating in women's empowerment projects and activities		24,229	
# of individuals participating in youth focused projects and activities (15-35 years old)		89	

<sup>1</sup> By September 31, 2022

<sup>2</sup> As a manufacturing company, MDLZ only invests directly in CFI-related activities.
<sup>3</sup> Progress from January 2018 to September 2021



## **MDLZ CFI PROGRESS TRACKING TABLE**

INDONESIA	2022	# Through direct	# Through
Indicator	Goal <sup>1</sup>	<b>investment</b> <sup>2</sup> (October 2020 to September 2021)	direct investment <sup>3</sup> (Since 2018)
FOREST PROTECTION AND RESTORATION			
# of farms mapped in direct supply chain	47,600	34,424	
# individuals receiving PES: Total Active	3,000	13,413	13,413
# multi-purpose trees distributed for on-farm planting	70,280	64,413	73,056
# hectares cocoa agroforestry in development	9,520	12,699	15,658
# of trees distributed for off-farm planting	234,267	149,052	188,283
# hectares of forest area restored off-reserve / in rural zone	28,560		17,324
SUSTAINABLE PRODUCTION AND FARMERS' LIVELIH	IOOD		
# improved cocoa seedlings distributed to farmers	924,236	924,236	3,694,556
# of farmers reached by GAP training programs	44,774	44,774	
SOCIAL INCLUSION AND COMMUNITY			
# of cocoa communities with active forest restoration and protection program (CBNRM)	3,694,556	17	23

<sup>1</sup>By September 31, 2022

<sup>2</sup> As a manufacturing company, MDLZ only invests directly in CFI-related activities.
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### **GLOSSARY**

AGROFORESTRY •••••••	On Cocoa Life registered farms, farmers are encouraged to plant non-cocoa trees alongside cocoa crops. This supports soil quality, encourages diversification and provide new sources of income.
CLIMATE-SMART •••••• COCOA (CSC)	The adaptation of Climate-Smart Agriculture (CSA) practices to the management of Theobroma Cacao (cocoa).
COCOA & FORESTS • • • • • • • • • • • • • • • • • •	A public private partnership to end deforestation and restore forest areas.
COMMUNITY-BASED • • • • • • • • • • • • • • • • • • •	These are plans developed with the cocoa-growing communities in partnership with Cocoa Life to determine forest restoration and conservation actions.
COMMUNITY ACTION ••••• PLANS (CAPS)	These plans are developed and implemented by the communities to ensure their development socially, economically and environmentally. Communities determine their community development actions – including forest protection and restoration – to encourage ownership and because communities are better placed to effectively protect and restore degraded forests if they have a decision- making role.
CROP DIVERSIFICATION • • • •	Growing a variety of crops on a farm and also off-farm, not just one. This expands production related activities and also reduces risk to farmers by allowing them to spread their income-generation over multiple crops.
ECONOMIC/SHADE ••••••	Shade trees are an important part of sustainable cocoa farming; they safeguard cocoa against too much sunshine and heat with a positive influence on long term productivity, help safeguard biodiversity, and can provide additional income for farmers.
FARM MAPPING	Farm mapping is usually done by people walking around the farm with a GPS device to delimit the boarders. It helps us understand farm sizes and locations and therefore monitor that there is no expansion into protected areas. Understanding where and under which conditions cocoa is produced allows prevention of farms expanding into the forest.
FRAMEWORKS •••••••	CFI's landmark agreements to end deforestation and promote forest restoration and protection in the cocoa supply chain.



### **GLOSSARY**

GOOD AGRICULTURAL • • • • • • • PRACTICES (GAP)	Cocoa Life registered farmers receive training in good agricultural practices – yield enhancing farming methods and facilitating access to inputs such as improved planting material and fertilizers.
INPUTS	Fertilizers, agro chemicals and tools for farm work that are crucial to a healthy cocoa farm.
INTER CROPPING	Other crops are grown on the same plot of land as cocoa. These can be food crops like plantain or taro, or trees that have different uses, including fruits, spices, medicinal plants and fuel wood.
LANDSCAPE APPROACHES •••	A landscape approach is a multi-stakeholder effort to promote a sustainable landscape across a large area of land.
PAYMENTS FOR ENVIRONMENTAL SERVICES (PES)	Payments for Environmental Services – economic incentives offered to farmers for adopting agreed agroforestry practices but also forest protection and reforestation.
POLYGON MAPPING	Polygon mapping is the tracing of farm boundaries using geo-location technology such as satellite receivers. The polygon is the name of the shape that represents the farm after mapping.
SHADE TREES •••••••	Non-cocoa trees distributed to provide additional sources of income and shade to help cocoa grow
TARGETED GAP	Supplying farmers with a tailored package of services – including yield enhancing farming methods and facilitating credited loans to access to inputs such as pest control and fertilizers
VILLAGE SAVING AND • • • • • • • • LOANS ASSOCIATIONS (VSLAs)	A flagship activity of Cocoa Life, their purpose is to encourage savings and access loans for cocoa farmers. Members of a VSLA make small, regular monetary contributions to a shared pool, from which they may each take out low-interest loans. At the end of a one-year cycle, the sum of the pool is shared out among members based on contributions made, and a new contribution cycle begins.

