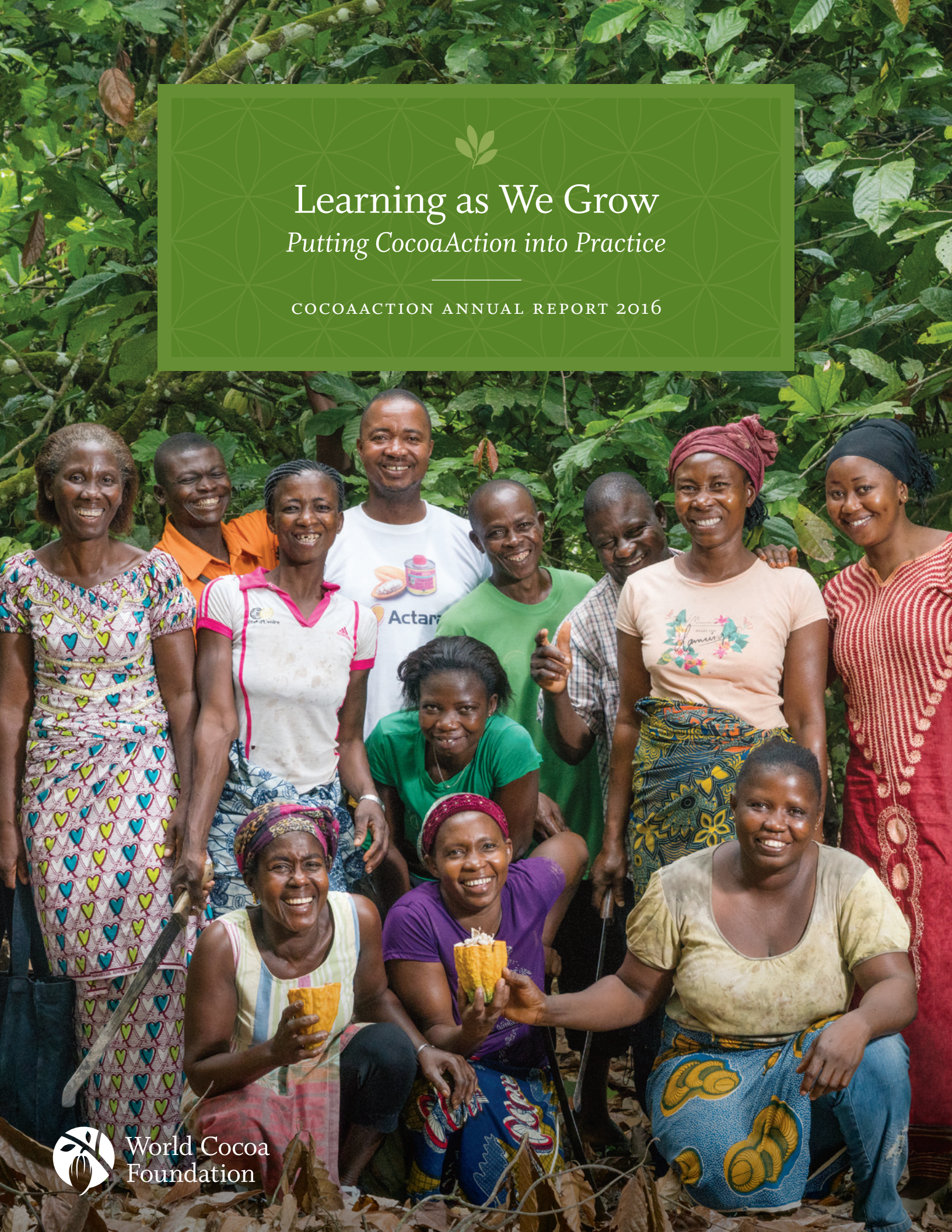
Learning as We Grow

Putting CocoaAction into Practice

COCOAACTION ANNUAL REPORT 2016



World Cocoa Foundation

CocoaAction Vision

CocoaAction is a voluntary industry-wide strategy for a rejuvenated and economically viable cocoa sector.

Our vision is a sustainable and thriving cocoa sector—where farmers prosper, cocoa-growing communities are empowered, human rights are respected, and the environment is conserved.

By 2020, our aim is to help 300,000 farmers adopt CocoaAction productivity practices and empower 1,200 communities through community development interventions in Côte d'Ivoire and Ghana.

INDEPENDENT ASSURANCE

PricewaterhouseCoopers LLP (PwC) were appointed to provide independent assurance on our CocoaAction Annual Report for the year ended 31 December 2016. PwC performed a limited assurance engagement in accordance with the International Standard on Assurance Engagements ISAE 3000 (Revised), 'Assurance Engagements Other than Audits and Reviews of Historical Financial Information', issued by the International Auditing and Assurance Standards Board, and in doing so, they applied the Institute of Chartered Accountants in England & Wales (ICAEW) Code of Ethics.

PwC's scope was to provide limited assurance over our processing and compilation of data submitted by the CocoaAction member companies in preparation of selected Key Performance Indicators (KPIs) presented in this report.

PwC's Limited Assurance Report, as well as a description of our compilation methodology—against which they assessed our preparation of the KPIs—will be available on WCF's website, worldcocoafoundation.org.

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Foreword from the WCF President

I AM VERY PLEASED TO INTRODUCE the second CocoaAction Annual Report, which focuses largely on learnings that the World Cocoa Foundation (WCF) and CocoaAction companies observed through the end of 2016.

CocoaAction has proven to be an impressive model for collective industry action on pressing sustainability matters. This report covers activities in 2016, when CocoaAction—with its emphasis on collaboration between chocolate and cocoa industry leaders, producing and consuming governments, development partners and civil society actors—demonstrated its true potential for leading the way in global cocoa sustainability efforts.

The twin focus of CocoaAction on boosting productivity and strengthening community development is more important than ever. Agricultural intensification is a crucial priority to stop deforestation and forest degradation in West Africa. Over time, cocoa yields in West Africa have been flat or trending slightly downward, despite recent record production levels. Increasing productivity on environmentally suitable lands and boosting farmer income are essential for reducing pressure for agricultural encroachment into forested lands. Our goal is to "produce more cocoa on less land."

This is exactly what the CocoaAction strategy is doing: doubling farmers' yields through improved planting materials, fertilizer, and improved agricultural practices. In addition, for existing degraded landscapes, there is significant scope to develop mixed agro-forestry systems, where cocoa trees are grown with shade trees—and this is the goal of our new Cocoa and Forests Initiative.

The first full year of CocoaAction implementation generated important accomplishments and lessons learned for our future work.

One of our accomplishments was collecting 15,000 data points—representing unprecedented industry effort and to our knowledge, the largest co-owned data set in West African cocoa. Through the process of data collection, we found that CocoaAction companies have successfully supplied 147,000 farmers with interventions to improve their livelihoods.

To go the remaining distance and achieve our 2020 goal, WCF and CocoaAction companies must adjust according to lessons learned in 2016. We must support cocoa farmers to overcome observed financial barriers to adopting productivity interventions. We must improve our understanding of women's needs and roles in cocoa-growing communities through gender-focused studies. And we must remain flexible and ever-learning, particularly from one another.

WCF is proud of the enormous amount of work that we and the CocoaAction companies have invested in producing this report. CocoaAction continues to be a journey of transformation and change, and I encourage you to continue providing us with your thoughts and input. Together, we will shape the future of CocoaAction and positively impact cocoa farmers and their families around the world.

Richard Scobey

Richard Scobey
WCF President

Foreword from the WCF Chairman

THE CHOCOLATE AND COCOA industry is increasingly aware that it cannot grow and prosper unless cocoa-growing communities also thrive and are prosperous.

Through CocoaAction, the industry has dedicated itself to the belief that cooperation, innovation and collective action are the best means of achieving our vision of thriving cocoa communities. The path traveled thus far by industry has required unprecedented open dialogue and transparency between companies and with governments and civil society organizations, all working collaboratively to help ensure the greatest impact.

In 2015, CocoaAction served as the platform that united the cocoa industry in sharing a vision for achieving sustainability in the cocoa supply chain. In 2016, we began to turn that vision into reality: CocoaAction companies finalized a shared approach to collecting and measuring data to better inform the CocoaAction strategy. Through a common monitoring & evaluation framework, companies reviewed detailed data together—an unprecedented milestone made possible only through extensive collaboration and transparency.

The monitoring and evaluation framework measured the progress and effectiveness of the CocoaAction strategy based on common key performance indicators. Learnings from this data collection and sharing are already helping to re-shape the CocoaAction strategy.

We engaged with the governments of Côte d'Ivoire and Ghana, as well as civil society organizations and other stakeholders, to underscore our commitment to building a strong public-private partnership that will quicken the journey to success. We continue to welcome input from additional public and private sector partners because we know that more cocoa farmers will be reached when others join us.

In its first year of implementation, CocoaAction achieved verifiable progress that points to even greater promise. We know, however, that real and sustainable change takes time. As we travel this journey and learn through experience the lessons about what works best and what most needs improving, we must be prepared to refresh and recalibrate our approach. I am confident that we will do so.

There is still much that needs to be done, but CocoaAction in 2016 showed that we are on our way.

Barry Parkin
WCF Chairman

About CocoaAction

Transforming the Cocoa Sector

"We at Ferrero believe in the CocoaAction model and are using the framework to build our 2030 sustainability strategy."

STEFANO SEVERI, PRODUCT SUSTAINABILITY MANAGER, FERRERO

LAUNCHED IN 2014, CocoaAction is a voluntary, industry-wide strategy that aligns the world's leading cocoa and chocolate companies, the governments of Côte d'Ivoire and Ghana, and key stakeholders on priority issues in cocoa sustainability. The CocoaAction vision is a sustainable and thriving cocoa sector where farmers prosper, cocoa-growing communities are empowered, human rights are respected, and the environment is conserved.

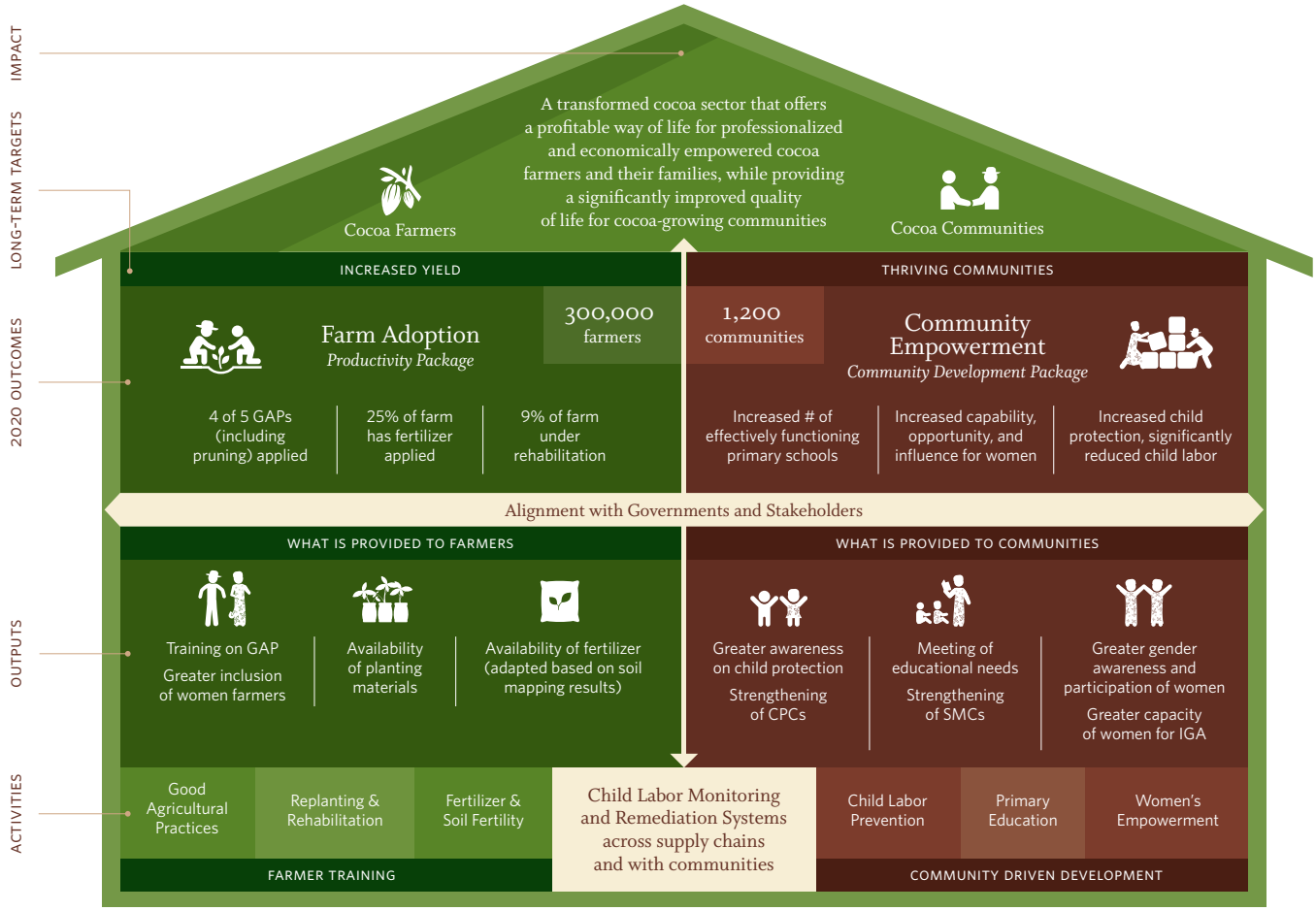
As Côte d'Ivoire and Ghana currently account for close to 60 percent of the world's cocoa supply, this geographically compact region is the logical starting point for a transformative initiative like CocoaAction.

> "The CocoaAction platform brings the strength of an integrated, holistic approach to address real challenges in the cocoa value chain by working directly with farmers and their families."
>
> *Cathy Pieters, Director, Cocoa Life, Mondelēz*

Nine of the world's largest cocoa and chocolate companies—Barry Callebaut Group; Blommer Chocolate Company; Cargill Cocoa & Chocolate; The Ferrero Group; The Hershey Company; Mars, Incorporated; Mondelēz International, Inc.; Nestlé; and Olam International—are partners in CocoaAction. These companies are helping to lead the sector in building an economically viable and sustainable cocoa industry by:

- Aligning on priority issues
- Enabling scale through common interventions and an agreed-upon framework for measuring results
- Employing a holistic focus on the farming household and cocoa-growing communities
- Sharing best practices and failures through ongoing learnings
- Working closely with the governments of cocoa-producing countries and other key stakeholders

CocoaAction West Africa Results Framework: What We Measure



The World Cocoa Foundation (WCF) is the strategy holder and backbone organization for CocoaAction. WCF facilitates company implementation and measurement of the strategy, identify opportunities to lend expertise in policy discussions, mobilize to fill gaps in resources, and generate new insights and learnings to amplify CocoaAction impact.

An Inclusive, Replicable Model

The CocoaAction strategy functions through the following process:

1. Chocolate and cocoa companies make individual commitments around aligned priority issues...
2. ...where systemic and non-competitive issues are identified, solutions are designed to jointly tackle them...
3. ...and are embodied in shared activities and agreed upon results.
4. Industry commits to specific targets...
5. ...and shares and acts upon results, best practices, challenges and missed opportunities in a supportive learning culture.
6. Industry leads, working closely with other stakeholders to design and implement complementary activities...
7. ...in close coordination with governments and other local stakeholders, and working with other relevant multi-stakeholder initiatives...
8. ...with WCF as the holder of the umbrella strategy.

CocoaAction companies have agreed on non-competitive activities and are aligning their sustainability initiatives across two main areas: productivity and community development. In 2017, companies will expand this work to include sustainable livelihoods and environmental sustainability.

In 2014, CocoaAction organized around eight thematic work streams that companies identified as priority areas in which to intervene. CocoaAction work streams evolve as needs within the West Africa cocoa context change,

Workstreams

and companies lead specific work streams based on their unique expertise. Work stream activities are coordinated in partnership with the governments of Côte d'Ivoire and Ghana, civil society organizations, and other cocoa sustainability stakeholders.

CocoaAction seeks to address challenges along the cocoa supply chain, which include:

Low Productivity

Farmers often have limited knowledge of modern farming techniques and farm management skills that could increase productivity, as well as limited access to financing that would allow for the purchase of input supplies and quality planting material. Tree age, cocoa pod production, reduced soil fertility, and pests and diseases further impede productivity.

Pests & Disease

In Côte d'Ivoire and Ghana, an estimated 30–40 percent of cocoa is lost to pests and diseases.

Environmental Concerns

Soil fertility levels degrade over time. Improving productivity through composting and soil fertility management rejuvenates cocoa lands. Promoting agroforestry techniques to sustain a diversity of shade trees, food crops, cocoa and other cash crops encourages productive, healthy, and sustainable farms for cocoa-growing communities.

Market Challenges

While the governments of Côte d'Ivoire and Ghana manage the internal price of cocoa for their farmers, the percentage of the world trade price that cocoa farmers receive globally varies significantly by region. This is due to a number of factors, including: the regulatory environment; access to market information; selling cocoa individually versus leveraging the power of group buying as part of a co-op; understanding of cocoa quality requirements; and transportation costs.

Access to Education

In some areas, a lack of quality basic education affects farmer labor practices and business decisions. It also encourages youth migration to urban areas, hindering the long-term viability of cocoa farming. Functional literacy, agricultural livelihoods training, youth leadership, and teacher training programs that improve access to a quality and relevant education are essential to sustain cocoa-growing communities in the long term.

Child Protection

According to some estimates, there are 2.1 million children working in conditions of child labor in the cocoa supply-chain of Côte d'Ivoire and Ghana. While the vast majority of these children are helping out on their families' farms, they often undertake hazardous tasks and sometimes work to the detriment of their schooling. Preventing and reducing child labor in the cocoa sector is a shared responsibility that must be shouldered by industry leaders together with governments, civil society organizations, communities and farming families.

Gender Equality

Women in cocoa-growing communities are often not acknowledged for the roles they play in the cocoa supply chain. Studies have found that women perform about half of farm-level tasks on West African cocoa farms.

Goals for 2020

CocoaAction companies commit to using their resources to help create a sustainable, thriving cocoa sector. By 2020, CocoaAction companies aim to support 300,000 cocoa farmers to adopt CocoaAction productivity practices and empower 1,200 communities through community development interventions in Côte d'Ivoire and Ghana.

PRODUCTIVITY PACKAGE

300,000 Cocoa Farmers

in Côte d'Ivoire (200,000) and Ghana (100,000) supported to adopt CocoaAction productivity practices.

Apply Good Agricultural Practices

Adopt Recommended Planting Material

Adopt recommended soil fertility practices

COMMUNITY DEVELOPMENT PACKAGE

1,200 Communities

empowered through community development interventions.

Child Labor Prevention

Children are protected and child labor is significantly decreased

Primary Education

The number of effectively functioning primary schools is increased

Women's Empowerment

Women have increased opportunities and capabilities to generate increased income and influence decisions

A Summary of CocoaAction Progress in 2016

In order to create the sustainable, thriving cocoa sector that CocoaAction envisions, WCF plays a variety of roles:

Strategic Driver

Through CocoaAction companies' implementation work in 2016, the strategy moved from the theoretical to the practical. Because 2016 was the first year that both CocoaAction programmatic areas—productivity and community development—were implemented, WCF's role as strategic driver was critical.

> "CocoaAction entered its first year of implementation in 2016 and this focus was clear. It's encouraging to see increased engagement and understanding of sustainability issues across a larger number of players as a result of CocoaAction. We are committed to CocoaAction with a focus on impact at scale, efficiency, and credible progress with farmers."
>
> *Andy Harner, Vice President Global Cocoa & Sustainability, Mars Incorporated*

WCF regularly convened CocoaAction companies to discuss challenges and learnings they uncovered during implementation. These discussions are fundamental to enable CocoaAction companies and WCF to achieve sector-wide transformation.

Partnership Builder

WCF champions multi-stakeholder partnerships, acknowledging that achieving sector-wide transformation requires coordinating activities with key stakeholders including farmers and farmer cooperatives, cocoa-producing country governments, donors, civil society organizations and certification and standard-setting bodies. Through partnerships, CocoaAction companies and WCF coordinate complementary interventions to improve cocoa sector sustainability and create a knowledge platform to share best practices and challenges.

One key partner group is the four major cocoa certification and standards bodies—Fair Trade USA, Fairtrade International, Rainforest Alliance and UTZ. CocoaAction companies and WCF continued to work in close collaboration with these organizations in 2016 to refine implementation processes and establish joint trainings on CocoaAction interventions.

> "CocoaAction companies' activities complement our own work, and collaboration and transparency allows us to learn from each other and improve our programs."
>
> *Karen Reijnen, Monitoring & Evaluation Officer, Customized Services, UTZ*

Resource Mobilizer

In CocoaAction's early days, WCF was challenged by producing-country government partners to create new programs or investments that would resemble traditional donor-funded activities. As CocoaAction pursues a long-term strategy that will accomplish more than any one company could achieve on its own, WCF plays a key role in developing relationships with new donors and partners and in ensuring that resources are efficiently used to further progress toward CocoaAction targets.

In 2016, WCF organized a high-level regional consultation on Cocoa Swollen Shoot Virus (CSSV) in Abidjan, Côte d'Ivoire to extend the implementation of the 2015 MOU between *Le Conseil du Café-Cacao* and WCF. The 2016 consultation engaged Le Conseil du Café-Cacao to commit to a more regional focus and approach to tackling CSSV, and enabled better coordination of efforts, helping ensure that resources will be used effectively across countries that are affected by the virus.

Policy Influencer

Through continuing dialogue with the governments of Côte d'Ivoire and Ghana, CocoaAction companies and WCF are lending their expertise to help develop policies that strengthen the sustainability of the cocoa industry and its farmers. For example, in 2016, WCF collaborated closely with the Ghanaian government in Côte d'Ivoire to improve planting materials, a mutual priority for Ghana and the cocoa and chocolate industry. In addition, in organizing a high level consultation on CSSV, CocoaAction companies and WCF helped broker a commitment by West African policymakers to work together to develop a regional approach to addressing the disease. Finally, WCF established the Donor Dialogue Platform in 2016, which serves to convene donors so they may contribute to cocoa sustainability discussions, improve partnership and better target support.

> "The CocoaAction dataset represents an unprecedented industry effort and to our knowledge, the largest co-owned data set in West African cocoa."
>
> *Richard Scobey, President, World Cocoa Foundation*

Technical Convener

While the CocoaAction companies were aligning their approaches, WCF recognized a need to engage external experts to fine-tune the CocoaAction approach and build efficiencies. WCF continues to engage technical experts such as the Jacobs Foundation, the International Cocoa Initiative (ICI), and the Sustainable Trade Initiative (IDH) to provide critical feedback on the CocoaAction approach to education, child labor prevention, and fertilizer and planting materials, among other issues.

Data and Learning Facilitator

Cooperative data collection enables CocoaAction companies to better understand their impact, promote accountability and inform areas for further research than they could with individual efforts. The wealth of data collected on cocoa farming in Côte d'Ivoire and Ghana—a total of 15,000 data points, or single measurements—represents an unprecedented industry effort to collect co-owned data. As this was the first year that data was collected and compiled within the CocoaAction measurement and evaluation framework, companies further enhanced their learning from an aligned approach to data collection itself. Armed with these insights, CocoaAction companies and WCF can continuously finetune and expand interventions and inform future activities and programs.

2016 CocoaAction Data

Telling a Story of Progress

"One of our greatest accomplishments in 2016 was learning. We're moving forward with a heightened sense of understanding and urgency because of what we were able to learn from our first year of quantitative data gathering."

NICKO DEBENHAM, VP HEAD OF SUSTAINABILITY & MD BIOLANDS GROUP, BARRY CALLEBAUT

2016 CocoaAction Data: Executive Summary

In 2016, CocoaAction companies reached 147,000 farmers—nearly 50 percent of the farmers needed for our 2020 goal—with productivity package interventions, such as adopting good agricultural practices, improving replanting and rehabilitation practices, and enhancing fertilizer and soil fertility. In addition, CocoaAction companies identified approximately 330 communities to engage with community development interventions, such as preventing child labor practices, increasing primary education among cocoa farmers and their families, and empowering women to join the effort to build a sustainable cocoa industry. While some CocoaAction companies were already conducting these types of productivity and community development interventions before CocoaAction's inception as part of their individual sustainability programs, in 2016, these interventions were aligned with the CocoaAction strategy. Companies brought new focus to launching community needs assessments, establishing supply chain-based child labor monitoring and remediation systems (CLMRS) and in aligning women's empowerment interventions.

Despite several indications of progress, data also showed that CocoaAction companies encountered unforeseen difficulties in cocoa farmers' adoption of certain productivity and community development interventions.

In addition, aligning methodologies for data collection has presented some limitations. To address these challenges, CocoaAction companies are identifying where improvements can be made in coming years. The specific challenges and proposed improvements are discussed further in the pages that follow.

CocoaAction is designed for learning and scaling impact. CocoaAction companies will continue to identify knowledge gaps that may inform where future activities should be focused and new interventions developed. Our commitment to continued learning and improvement is the reason CocoaAction has emerged as a successful platform for building new partnerships among governments and donor partners to advance cocoa sustainability efforts.

147,000

Farmers

Supplied with CocoaAction productivity package interventions in 2016.

330

Communities

Identified to receive community development interventions in 2016.

Every member company contributed data, creating the first co-owned, cross-operational dataset in cocoa—a groundbreaking step for voluntary collaboration on sustainability data within the sector.

Groundbreaking Collaboration to Collect Co-Owned Data

After working with origin governments, civil society organizations and technical experts to agree upon CocoaAction's six core intervention areas in 2015, CocoaAction companies and WCF, as organizer, developed companies developed and finalized an approach to measuring their results using a comprehensive set of key performance indicators (KPIs)—the M&E Results Framework.

WCF published the Results Framework and key performance indicators in the *Monitoring & Evaluation (M&E) Guide*, which launched in March 2016.

In 2016, for the first time, CocoaAction companies collected and reported data on cocoa farmers, their farms and communities according to the framework and indicators published in the M&E Guide.

About the CocoaAction Monitoring & Evaluation Results Framework

The CocoaAction Results Framework provides the specific performance indicators that are used to help measure companies' progress against CocoaAction's theory of change for Côte d'Ivoire and Ghana. The framework has five levels that span CocoaAction's two programmatic areas of productivity and community development:

Level One: The productivity and community development programmatic areas complement and enhance each other, emphasizing CocoaAction companies' understanding that sustainable cocoa can be grown only by professional farmers whose communities are thriving.

Level Two: Each of the two programmatic areas has an outcome statement to guide implementation and to focus efforts on creating change that improves cocoa farmers' realities long-term. To reach the long-term outcomes, each programmatic area is subdivided into three action pillars. Productivity action pillars are Good Agricultural Practices, Planting Material and Soil Fertility Management. In community development, action pillars are Primary Education, Child Labor Reduction and Women's Empowerment.

Level Three: Each action pillar includes a results statement describing our anticipated 2020 outcomes and the accompanying indicators that will be used to measure progress.

Level Four: Outputs describe the most immediate performance of CocoaAction interventions, and these outputs feed directly into each of our anticipated 2020 outcomes.

Level Five: The fundamental layer of the CocoaAction Results Framework comprises the activities, or interventions, that CocoaAction companies agree to implement.

The CocoaAction Results Framework features 12 indicators at the output level (four on the productivity side and eight on the community side), 14 indicators at the 2020 outcome level (three on the productivity side and 11 on the community side) and one indicator per programmatic area at the long-term outcome level.

CONTRIBUTING TO THE SUSTAINABLE DEVELOPMENT AGENDA

In 2015, a year after the CocoaAction strategy was established, the United Nations developed the Sustainable Development Goals (SDGs) to end poverty, protect the planet and ensure that all people can live in peace and prosperity. Since then, civil society and the private sector have collaborated to create practical tools and guidelines that assist businesses putting the SDGs into action and integrating their existing purpose frameworks.

Through their collaborative effort to promote best practices in the cocoa industry, CocoaAction companies are naturally aligned with and helping to advance key SDGs—including sustainable agricultural production, poverty reduction and gender equality. In addition, collective CocoaAction efforts demonstrate the value of sector collaboration as described in the United Nations' sustainable development agenda.

"We are at the beginning of the implementation process, and there is no precedent for an effort like CocoaAction. We must remain flexible and remember that in instances where we've faced challenges, we have not failed—we've just started."

Jean-Philippe Ake, Senior Director, Global Commodities Management, The Hershey Company

2016 RESULTS: LIMITATIONS AND OPPORTUNITIES

Because CocoaAction companies collected and reported data for the first time in 2016, the aggregated data presents a number of limitations, a few of which are represented below:

First Year Data: The 2016 data is limited in providing understanding of Côte d'Ivoire and Ghana cocoa productivity overall. But it does provide a baseline against which to conduct trend analyses—discussed further in the following data report—especially as detailed data on nearly 3,000 CocoaAction farms is collected year over year.

Consistency Challenges: While collecting data, CocoaAction companies experienced methodological challenges, indicating the need for strengthened data collection systems. Consistency challenges were most significant in collecting yield data. CocoaAction members are currently experimenting with improved approaches such as record keeping by farmers for a joint review. CocoaAction companies and WCF will also pursue research on areas such as farmer behavior, intervention dependencies and gender to improve future CocoaAction learnings, reporting and prioritization. Further, CocoaAction companies will develop and deliver field-based training and tools for data collectors to promote more consistency in data collection.

Few Female Farmers: The number of female farmers in the sample is broadly representative of the fraction of female farmers in Côte d'Ivoire and Ghana—5 and 22 percent respectively. Because the number of female cocoa farmers is so limited, it is difficult to make assumptions or derive conclusions based on gender. For this reason, and because WCF has just one year's data, CocoaAction companies have not reported results based on gender in the following report. However, in future years, CocoaAction companies aim to better understand female farmers' adoption of GAP and how many are able to employ workers for their farms. Therefore, CocoaAction companies are committed to further measurement and deeper studies to better understand female farmer data.

WCF welcomes input from third parties in the cocoa sustainability space as we further explore the data and what it means to scaling the impact of CocoaAction in future years.

About 2016 CocoaAction Data

The purpose of aggregated CocoaAction data is to drive cocoa sustainability by:

- Increasing collaborative learning on measuring and reporting best practices;
- Improving identification of critical sustainability issues informed by data; and
- Benchmarking results of sustainability initiatives against CocoaAction targets and average performance.

CocoaAction companies collected data in alignment with the agreed-upon CocoaAction M&E Results Framework and the M&E Guide. WCF then analyzed the data using a process verified by PricewaterhouseCoopers to produce a central set of results.

Data Collection Methodology

CocoaAction companies used a methodology called "adoption observation" to collect 2016 productivity data. This methodology has traditionally been used in similar contexts. It has limitations—mainly because employing data collectors, or enumerators can introduce inconsistency. While enumerators in 2016 attended CocoaAction trainings, in some cases skills were lacking and assessment ambiguity introduced potential error around some data. This means that:

- CocoaAction data is appropriate to identify trends at the macro level, but micro patterns are less reliable. The data will provide reasonable absolute estimates at an aggregate level in the absence of scientific studies.
- Comparison between individual member data is not recommended.
- The need to build the capacity of data collectors in cocoa is an important finding that will require intervention to improve the general state of sustainability data at sector level.

In July 2017, CocoaAction members and their partners joined together for on-farm data collection training sessions. These trainings present an opportunity to build the capacity of data collectors to improve the quality and consistency of cocoa sustainability data in the future.

The central set of 2016 data that CocoaAction companies and WCF produced is based on a sample of nearly 3,000

farms that represents 147,000 smallholder cocoa farmers in Côte d'Ivoire and Ghana whom CocoaAction companies have engaged through their sustainability programs.

The majority of this data relates to productivity interventions. In 2016, companies began to align their work in cocoa-producing communities with CocoaAction, and therefore have not yet gathered sufficient data to collectively report on activities related to the Community Development programmatic areas and pillars.

> What follows is a summary of one of the largest observational datasets in West African cocoa and the largest existing cross-company dataset.

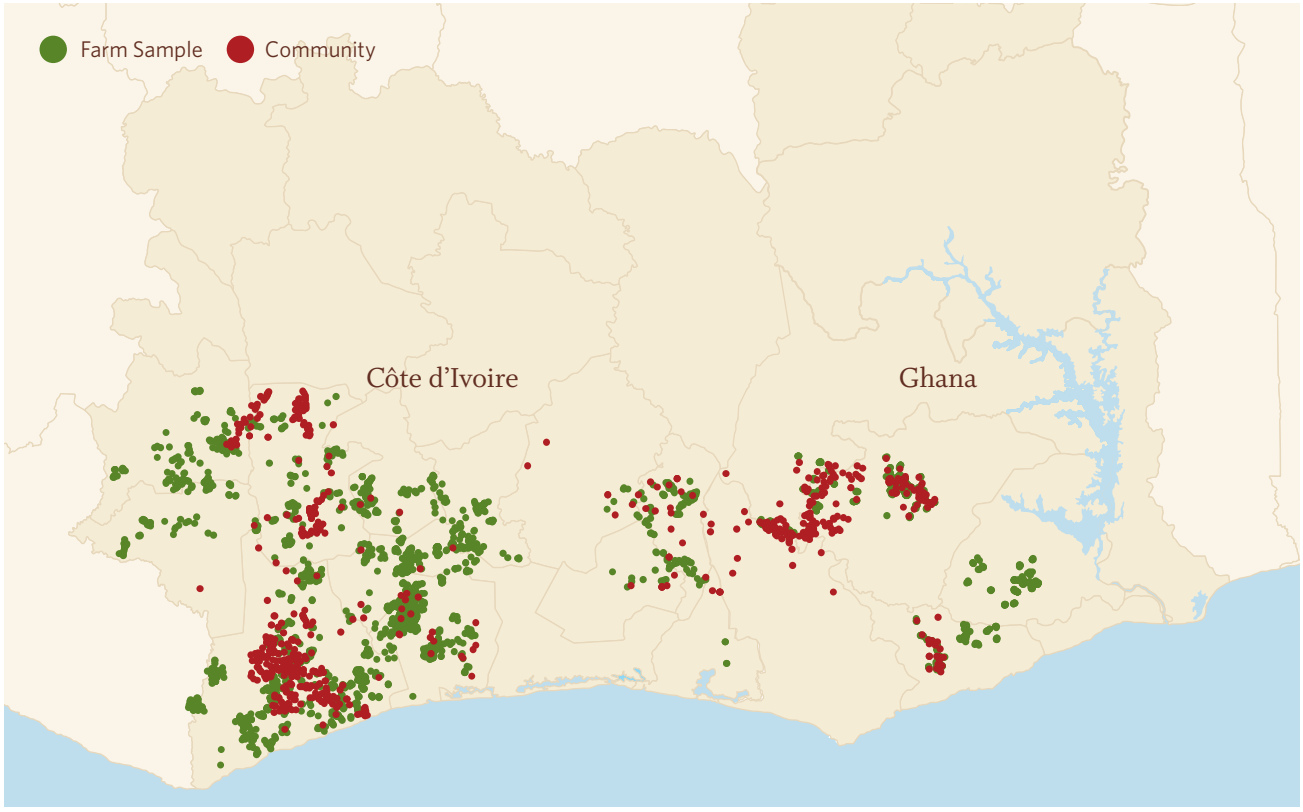
While reviewing the summarized data in this report, it is important to acknowledge that "CocoaAction farmers" do not represent average cocoa farmers in West Africa. Each CocoaAction company has its own approach to identifying which farmers in its supply chain will be included in CocoaAction activities. Sometimes these farmers have already been involved in companies' existing sustainability programs, and as a result may be performing better than other farmers in the supply chain.

Thanks to the process of collecting data in 2016, CocoaAction companies and WCF have recognized implicit differences between farmer types. This finding is significant for the future of CocoaAction—CocoaAction companies and WCF plan to analyze farmer typologies to scale and improve CocoaAction interventions.

ROADMAP TO SUCCESS

The CocoaAction Five-Year Roadmap, published in October 2016, is an effort to provide a long-term strategy balanced with the guidance required for near-term implementation. The document is not intended to be an exhaustive and complex list of all detailed activities. Instead, it is intended to provide those directly and indirectly involved with CocoaAction with an overview of the critical path and main moving parts of CocoaAction, and how these moving parts fit together to lead to CocoaAction's success. To view our five-year Roadmap, visit our website.

Overview of CocoaAction Community and Farm Locations



Summary CocoaAction Farm Profile

	CÔTE D'IVOIRE	GHANA	TOTAL	
Total number of farmers reached by CocoaAction interventions	114,883	32,488	147,371	Ⓐ
Total number of farms in sample data collection	2,392	551	2,943	Ⓐ
Total number of female managed farms in sample data collection	120	124	244	Ⓐ
Average age of all farmers	46	51	47	Ⓐ
Average farm size	3.4 ha	1.4 ha	3.0 ha	Ⓐ
Estimated typical tree density considering any cocoa tree (mature or immature)	1,260 tree/ha	1,100 tree/ha	1,200 tree/ha	Ⓐ

CocoaAction companies will continue to share information with one another and jointly discuss how they can improve their work to implement CocoaAction's key priorities. This is essential to identifying lessons learned and next steps, and to extracting the full value of aggregated data from 2016.

> "First-year data collection has reaffirmed areas we knew were weak, but this is not discouraging. As a result, we understand where to focus our energy so that we can improve in future years."
>
> *Darrell High, Cocoa Manager, Nestlé*

Productivity Data

CocoaAction's productivity package interventions are designed to increase learning and track implementation progress around three key areas: good agricultural practices; access to improved planting materials; and access to and correct use of fertilizer.

The objective of CocoaAction's productivity interventions is to increase yield and improve farmer livelihoods. In total, 147,000 farmers in Côte d'Ivoire and Ghana were reached through CocoaAction interventions in 2016. Of these, approximately 3,100 were recommended for and have adopted the full productivity package.

CocoaAction companies learned in 2016 that adoption of the full productivity package can be challenging for farmers, who may face financial hurdles in adopting certain Replanting & Rehabilitation and Soil Fertility Management activities. Farmers apply CocoaAction's recommended productivity practices as they have opportunity and willingness to do so. Companies have seen that farmers tend to avoid burdening themselves with debt when the financial benefits of productivity practices are unclear and financial support to adopt these practices is scarce or risky.

WCF plans to work closely with CocoaAction companies to better understand drivers of farmer adoption to improve future implementation of the productivity package. The data below sheds light on the adoption of individual productivity activities.

Good Agricultural Practices

CocoaAction's Good Agricultural Practices (GAP) are a set of farm management techniques and are used to measure farmers' yield improvement. CocoaAction's hypothesis is that the application of GAP, together with improved planting material and soil fertility interventions, will be more productive than conventional methods in creating more sustainable and profitable cocoa farms.

WCF found that 30 percent of CocoaAction farmers in Côte d'Ivoire and 23 percent in Ghana applied the required four out of five GAPs, including pruning, in 2016. Adoption rates for specific GAPs are reported below.

WCF found that 30 percent of CocoaAction farmers in Côte d'Ivoire and 23 percent in Ghana applied the required four out of five GAPs, including pruning, in 2016. Ⓐ

GAP 1: COCOA TREE PRUNING

Pruning, a core GAP, involves the selective removal of certain parts of a plant, such as branches and buds, to improve productivity. A well-pruned cocoa farm will capture more sunlight, produce more cocoa pods and suffer fewer disease and pest problems.

CocoaAction companies assess adoption of two pruning types:

- *Architectural Pruning:* selectively removing branches from a cocoa tree so it has a single, short trunk, a low jorquette (three to five branches emerging from the central stem) with its fan branches evenly spaced and growing somewhat laterally and vertically (this is best done at young tree age). Architectural pruning ensures that the structure of the tree is symmetric and stable.
- *Maintenance Pruning:* removing chupons (further upright suckers) as well as any branches that consume more energy than they produce. This thinning of the crown of the tree allows more sunlight to reach lower branches and permits air to move through the cocoa tree.

GAP 2: COCOA PEST AND DISEASE MANAGEMENT

Cocoa trees are susceptible to an array of threats, including viruses, fungi, insects, parasitic plants, and rodents. All of these can directly affect the amount of harvestable cocoa produced each year.

Cocoa farmers in regions of Côte d'Ivoire and Ghana where pests are common have a number of options available for managing these pests and diseases. CocoaAction recommends practices tailored to specific regions so that farmers can make their cocoa fields less hospitable to pests and diseases. Adoption of these practices is measured by outcomes—appropriate management is indicated by the absence of pests and diseases in the field.

CocoaAction companies encourage farmers to adopt the following pest- and disease-management practices:

- Sanitary harvest and black pod removal, or the systematic removal of all diseased and overripe pods from the farm before, during and after each harvest. This helps prevent the infection of healthy cocoa pods and trees by removing sources of infection.
- Mistletoe removal, or the pruning of all mistletoe-infected tree parts, prevents cocoa trees from infecting adjacent branches or spreading to neighboring trees.
- Use of biological or chemical insecticides, or removal of tree parts infected by mirids—insects from several species of the Miridae family that feed on cocoa pods and leaves.
- Use of biological or chemical insecticides, or removal of tree parts infected by stem borers—moth larvae (Eulophonotus myrmeleon) that tunnel into the trunks and main branches.

GAP 3: COCOA WEED MANAGEMENT

By preventing and removing weeds, a farmer reduces the competition cocoa trees face for water and nutrients. Weeding is particularly important during the first few years after establishment of a new cocoa field, or the rehabilitation of an old field, when the crowns of young cocoa trees are not yet large enough to provide shade that prevents weeds from growing. Because the root systems of young cocoa trees reach only the immediate area around their trunks, weeds can deprive the tree of water and nutrients.

Weeds can also provide habitat and cover for unwanted insects. They can make pest and disease management more difficult and less effective by hiding diseased pods that have fallen to the ground, which can be a source of infestation and infection. If weeds grow too thick, they can also impede pruning, harvesting and other activities. CocoaAction data collectors, or enumerators, walk each farm together with the cocoa farmer and assess if weeds are appropriately controlled, allowing cocoa trees to grow.

CocoaAction farmers can manage weeds in two ways:

- *Mechanical weeding:* regularly cutting back weeds in cocoa fields using cutting tools
- *Herbicides:* applying approved and recommended herbicides to reduce weeds or prevent weed sprouting

GAP 4: COCOA SHADE MANAGEMENT

Cocoa is an understory tree that, in the wild, is found growing along the edges of gaps and clearings in the forest. It does best when planted in fields that are partially shaded by a broken canopy of other, taller tree species. CocoaAction companies and WCF recommend that cocoa fields be lightly shaded by a canopy of long-living species.

By diminishing and diffusing the sunlight reaching the cocoa tree layer, shade trees moderate the environment

Good Agricultural Practices (GAP) Adoption Percentage Rates among Farmers Reached in 2015

	CÔTE D'IVOIRE	GHANA	TOTAL	
Cocoa Tree Pruning	40%	37%	40%	Ⓐ
Cocoa Pest and Disease Management	69%	70%	69%	Ⓐ
Cocoa Weed Management	59%	29%	53%	Ⓐ
Cocoa Shade Management	48%	54%	49%	Ⓐ
Cocoa Harvest Management	77%	54%	73%	Ⓐ

within the cocoa field. However, shading can also decrease short-term yield potential, and a shade cover that is either inadequate or too dense can favor pests and help cause damage to cocoa trees and pods.

CocoaAction companies evaluate farmers' shade management practices to ensure that:

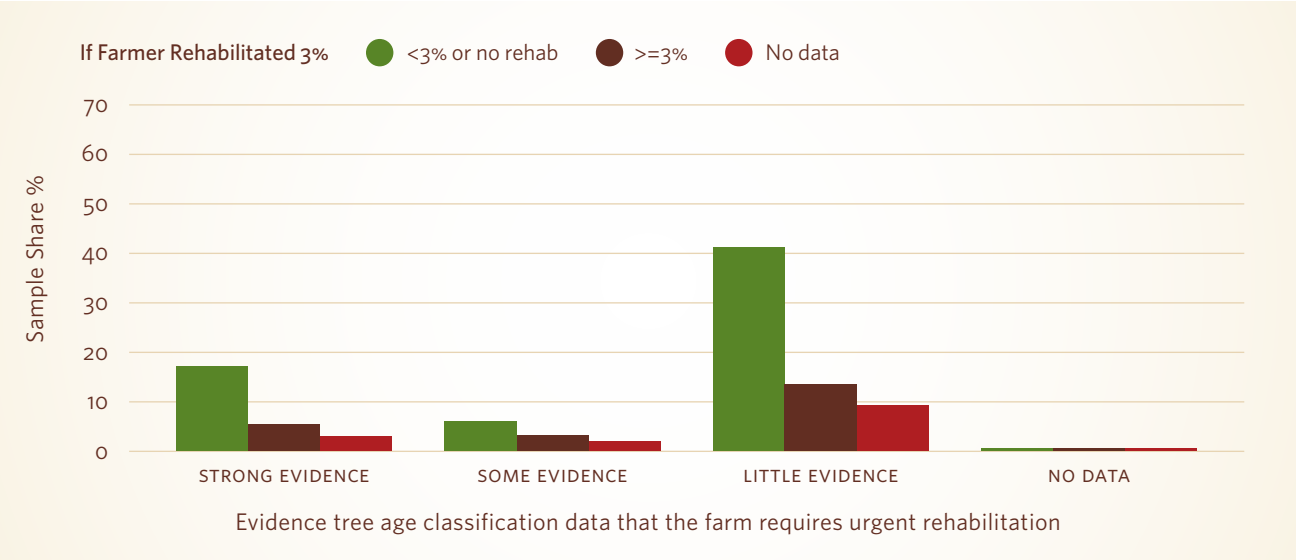
- The shade canopy plays a role in maintaining both the health and productivity of a cocoa field, as it affects the amount of water in the air (humidity) by limiting evaporation and reducing the airflow through the fields and among the cocoa trees.
- Shade trees intercept raindrops, which slowly drip down to cocoa fields. By capturing and slowly releasing rainfall, shade trees protect the soil from tropical downpours, reducing erosion, and provide the soil more time to absorb the precipitation. The shade trees also help the soil retain moisture by slowing evaporation.
- The habitat provided by appropriately chosen shade trees supports beneficial insects that feed on cocoa pests. The ground under shade trees is cool and moist, with increased leaf litter and organic material to providing habitat for a wide variety of insects. The crowns of shade trees also provide an array of different niches, favoring still other species of insects that prey on cocoa pests. A number of potential trees are known to harbor pests for cocoa trees and fruits—such trees must be avoided as shade trees.
- Some species of shade trees can make nutrients available for cocoa trees. They have deep and expansive root systems that draw nutrients up into their leaves from deep soil layers. As these nutrient-rich leaves fall to the ground and decompose, the nutrients are slowly released directly above the shallow roots of the cocoa tree. In addition, shade trees help prevent fast-growing grasses and shrubs from growing in cocoa fields, decreasing competition for moisture and nutrients.

GAP 5: COCOA HARVEST MANAGEMENT

Because the ripening process changes the flavor profile of cocoa, harvesting only mature cocoa pods is critical to the quality of cocoa beans. Ripe cocoa pods also contain larger, heavier cocoa beans than unripe pods, which makes them more valuable, as farmers are paid by weight.

The harvesting of overripe cocoa pods is bad for cocoa quality, as these beans often have germinated and may be moldy. During storage, cocoa beans from overripe or diseased pods can contaminate surrounding cocoa beans. Depending on the season, data collectors can review the quality of harvest management when assessing the cocoa trees and pods and discuss harvesting practices with farmers.

CocoaAction in Côte d'Ivoire: If Farm Requires Rehabilitation



Replanting & Rehabilitation

Many cocoa farms are not as productive as they could be due to disease and pests, tree age, and the effects of poor planting and maintenance practices. Therefore, replacing aging cocoa trees with new, productive cocoa trees is critical to the mid- and long-term economic sustainability of cocoa farming households. CocoaAction companies encourage farmers to invest in farm rehabilitation techniques that use improved planting materials to boost their productivity and increase their resiliency.

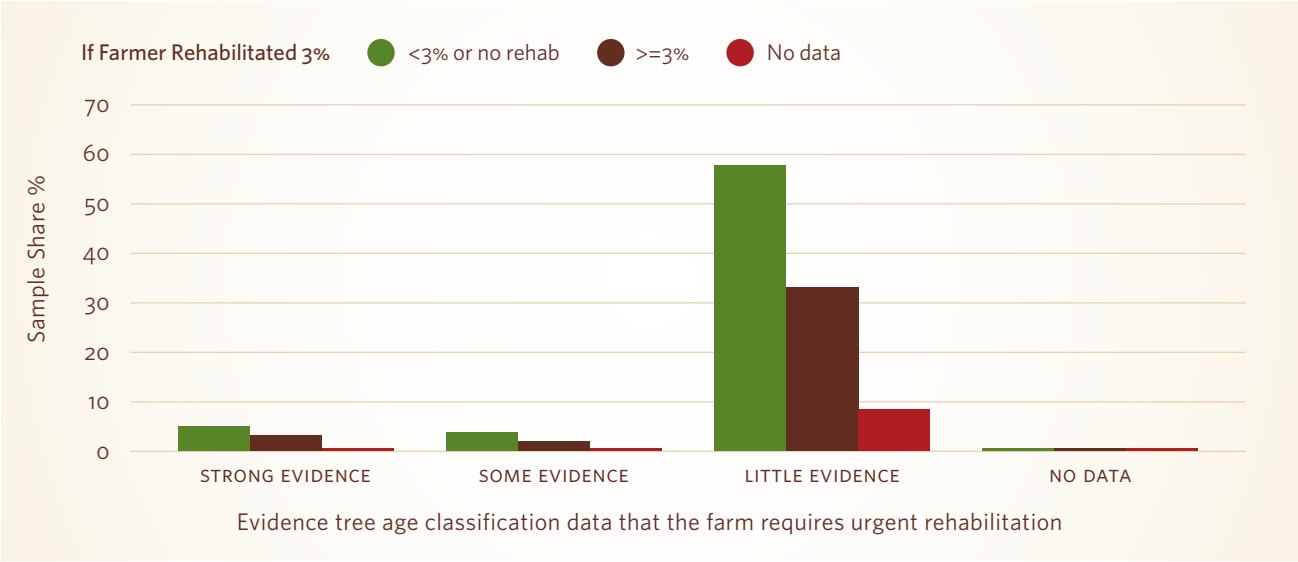
Specifically, CocoaAction companies encourage farmers to adopt the following practices:

Farm Rehabilitation: farmers rehabilitate their old and otherwise unproductive trees by replanting or underplanting.

- Replanting rehabilitates a cocoa field by removing the old trees within a section or block and then replanting. If the majority of the cocoa trees are unproductive, an entire cocoa field may be renovated (complete replanting). However, many farmers renovate their old cocoa fields in strips or blocks (gradual replanting). Grafting is an option if the stem and root systems of old trees remain healthy.
- Underplanting rehabilitates a cocoa field by planting new cocoa trees next to old, unproductive cocoa trees, which are left in place to provide shade. Once the new cocoa is nearly mature enough to produce cocoa pods, the old cocoa trees are removed to make room for their replacements. The growth of young trees will be slow as they are competing for sunlight and nutrients with existing trees, while there is a risk that prevalent diseases in the farm will damage the young cocoa trees.

Increasing Cocoa Tree Density: farmers introduce new trees to maintain or improve the optimal number of cocoa trees per hectare. Care must be taken that the young trees receive enough light.

CocoaAction in Ghana: If Farm Requires Rehablitation



- Enrichment planting increases the density of productive fields by planting new trees in gaps or open spaces among mature trees.
- Refill planting replaces young trees that did not survive the initial planting during rehabilitation efforts.

Through 2016 data, CocoaAction members learned that many farmers do not know or are not certain what type of cocoa they have planted or are currently planting on their farms. This is important, since using 'improved varieties' is one way for farmers to become more resource efficient and resilient. CocoaAction members are reviewing existing methods to identify, label, and communicate the use of improved planting materials to improve farmer's awareness in the future.

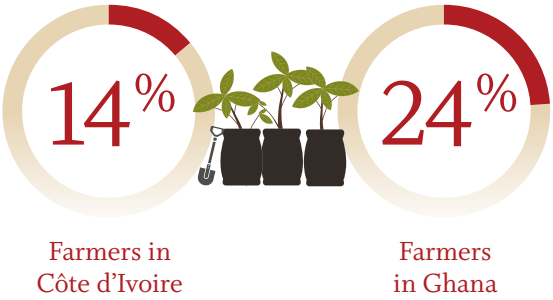
Soil Fertility Management

CocoaAction distinguishes three soil fertility management practices: soil erosion protection, soil health management, and soil nutrient replenishment. In 2016, CocoaAction focused special attention on soil nutrient replenishment practices and measures to renew and replenish the nutrients immediately available to cocoa trees through short-term interventions, such as approved chemical fertilizers.

Through an analysis of data, GAP application and farm mapping, each CocoaAction farm is assessed for fertilizer readiness. Only fertilizer-ready farmers are advised to implement soil nutrient replenishment.

Fertilizer readiness considerations include:

- *Tree age:* the majority of trees on the cocoa farm should be less than 25 years old, and different fertilizer practices should be applied for young cocoa trees (3–5 years and younger) and fully productive cocoa trees (5–25 years).
- *Implementation of GAP:* good agricultural practices, especially cocoa pest management, should be properly implemented.
- *Tree density:* tree density should be at least 800 trees per hectare (IDH).



In 2016, 14 percent of Côte d'Ivoire farmers and 24 percent of Ghana farmers adopted rehabilitation techniques using recommended planting materials on at least 3 percent of their farms, when these were required to improve productivity. Ⓐ

- *Yield:* yield should be at least 400 kg/ha (for minimum of 800 productive trees per hectare). Yield is considered a crucial criterion; a productive farm that is not in the optimal age bracket or density bracket might still be recommended for soil fertility management.

The 2016 data shows that many CocoaAction farms are not fertilizer ready—in other words, applying fertilizer to replenish nutrients is not a worthwhile investment to improve productivity on these farms. Because soil fertility management techniques are a significant investment for cocoa farmers, CocoaAction companies and WCF will further explore fertilizer readiness using criteria from the IDH—the Sustainable Trade Initiative, so that companies can strategically recommend soil fertility management to the farmers who will see the best returns.

While CocoaAction companies and WCF were pleased with GAP adoption rates reported from 2016, they have identified obstacles that some farmers face when evaluating whether to adopt these practices. Because fertilizer may be expensive, and because replanting requires tearing out old cocoa trees that may still be producing small yield, farmers must weigh financial concerns when considering GAP adoption. Some farmers are hesitant to lose income in the short term to implement GAP, even though these practices will improve their farms' long-term productivity. Others are reluctant to take on debt to implement replanting and rehabilitation and soil fertility management, which they fear their children will inherit once they have passed.

Identifying these behavior change obstacles is crucial for CocoaAction. To improve farmer livelihoods, CocoaAction companies and WCF must develop innovative ways to support farmers as they navigate financial decisions. CocoaAction companies are already adapting their approaches to provide farmers with improved access to finances and to coaching so that they can better understand financial risks and rewards.

Yield

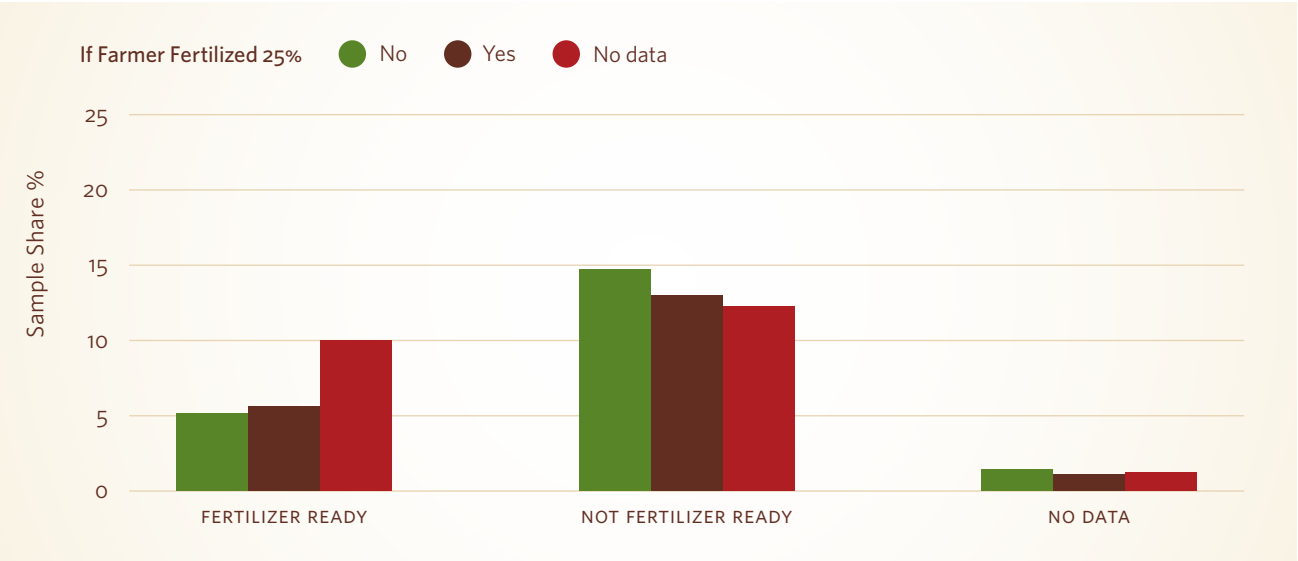
The CocoaAction productivity package was developed to promote a more efficient and effective means to increase yield (as measured by kilograms[kg] per hectare[ha]). With more efficient production, farmers have the potential to increase their revenues and improve their livelihoods. Furthermore, if farmers can produce more per hectare, they may be less inclined to increase plot size by encroaching on protected areas.

Farmers in Côte d'Ivoire

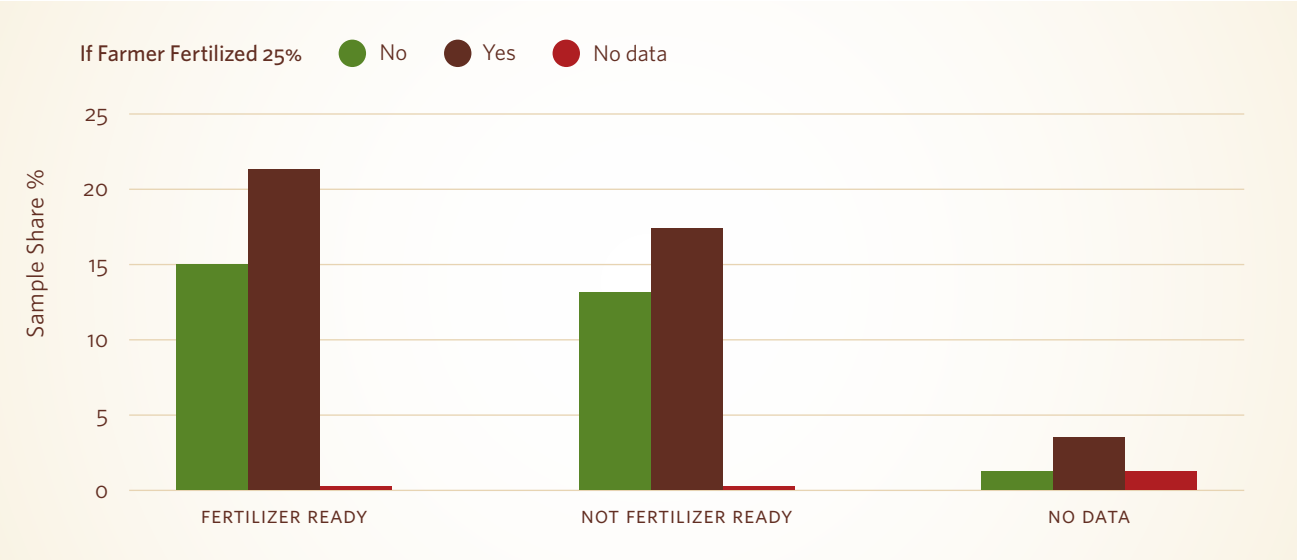
Farmers in Ghana

In 2016, 6 percent of Côte d'Ivoire farmers and 21 percent of Ghana farmers adopted soil nutrient replenishment, when fertilizer ready. Ⓐ

CocoaAction in Côte d'Ivoire: If Farm Is Ready for Fertilizer



CocoaAction in Ghana: If Farm Is Ready for Fertilizer



In 2016, CocoaAction companies collected yield data in two ways:

1. Companies reported average yield of their CocoaAction farmers using company-specific methods subject to minimum guidance.
2. Farmers self-reported yield during data collection.

The table at the bottom of this page displays yield reported. From 2016 data, CocoaAction members learned that reported yield across the partnership was consistently slightly above typical average yield figures in West Africa. However, even if controlled for tree age or fertilizer application, there was only spurious direct correlation between yield and good agricultural practice application observable from the data. Besides the expectation that many more factors influence yield than was controlled for, CocoaAction intends to improve yield measurement in general to investigate the relations further. Numbers vary significantly and point to the fact that at present there is no generally accepted way to collect yield data across the sector. CocoaAction companies are working toward an agreed upon approach for future reporting.

Community Development Data

Because CocoaAction companies began to align their existing community development interventions with the CocoaAction strategy for the first time in 2016, there was limited aligned data to report. However, the following data points demonstrate early progress toward CocoaAction targets.

- In Côte d'Ivoire, all CocoaAction companies began implementing community needs assessments—the first step in community-driven development—in approximately 83 cocoa-growing communities. Ⓐ In Ghana, community needs assessments were conducted in 244 communities. Ⓐ
- Four CocoaAction companies' initiatives in Côte d'Ivoire involved 14,762 CocoaAction farmers Ⓐ in Child Labor Monitoring and Remediation Systems (CLMRS)—an approach formulated by ICI to monitor for and remediate cases of child labor in supply chains, while child labor awareness and child protection capabilities are broadened in cocoa-growing communities through Child Protection Committees (CPC).
- In addition, across four CocoaAction companies' initiatives in Côte d'Ivoire, 1,157 women participated in Income Generating Activities (IGAs) Ⓐ, which over time can empower them to generate additional income.

CocoaAction companies continue to implement an array of community development activities in cocoa-growing communities. In 2017, CocoaAction companies will further align their initiatives with CocoaAction community development interventions, and WCF anticipates a deeper discussion of community development results.

Summary CocoaAction Yield (kg/ha)

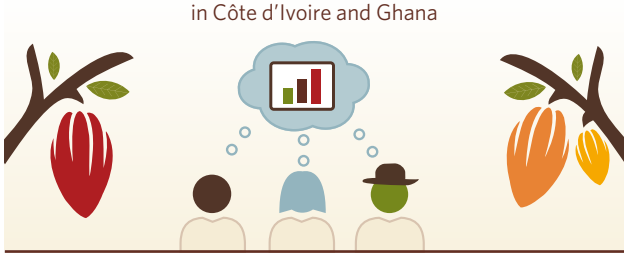
	CÔTE D'IVOIRE	GHANA	TOTAL	
Average yield of CocoaAction farmers self-reported (sample)	528	728	566	Ⓐ
Average yield of CocoaAction farmers company-reported	507	561	523	Ⓐ

Learnings and Future Planning

Because 2016 was the first year that CocoaAction companies collected data according to the M&E Results Framework, many learnings were gleaned from the process of data collection itself. As CocoaAction companies implemented this groundbreaking, collective impact effort, they identified areas for further exploration and improvement. These opportunities include improving understanding of farmer priorities and how they impact adoption of the full productivity package; undertaking a gender-focused study to learn more about women's needs and the roles they play in West Africa societies and cultures; and building capacity for community implementation.

Additionally, through the data collection process, CocoaAction companies understood their own capacities, helped promote accountability and encouraged learning. Aligning nine company data-collection systems and improving consistency takes time. CocoaAction companies are learning how to collect data in a consistent manner and are developing specific tools to facilitate data collection. As companies continue reporting against the M&E framework, they will highlight necessary improvements to be made at the central CocoaAction level and, correspondingly, at the company level.

The wealth of data collected on cocoa farming in Côte d'Ivoire and Ghana



15,000

Total Data Points

represents an unprecendented industry effort to collect co-owned data

While 2016 data collection confirmed that more work still needs to be done to understand more about cocoa farmer behavior and what actions most significantly impact farms and livelihoods long-term, the process also yielded 15,000 data points about cocoa farming in Côte d'Ivoire and Ghana. Aggregated insights from 2016 and beyond are crucial to allowing CocoaAction companies to check their progress individually and as a sector. Year over year, collected data will reveal patterns, outliers, successes and failures, and will be used to expand, correct and scale the CocoaAction strategy as needed to enable broader impact.

Our Work on the Ground

Reaching Cocoa-Growing Communities

"The cocoa and chocolate industry, producing and consuming governments, and civil society organizations all share the same goal—we want to see a robust and competitive global marketplace that provides strong incentives and sustainable livelihoods for cocoa farmers."

RICHARD SCOBEY, PRESIDENT, WORLD COCOA FOUNDATION

The Farmers' Perspective

Smallholder cocoa farmers in Côte d'Ivoire and Ghana are not simply viewed as beneficiaries of the CocoaAction strategy. Rather, they are strategic partners to CocoaAction companies and WCF, providing perspectives and learnings that enable iterations in strategy to improve impact.

In 2016, by implementing CocoaAction interventions, companies worked closely with 147,000 smallholder cocoa farmers and developed a better understanding of the challenges and obstacles they face. In the last quarter of 2016, the world trade price of cocoa dropped significantly—from USD $2,711.35 per ton to $2,287.80 per ton (ICCO)—in a short span of time. While the sector is still recovering, this price drop challenged CocoaAction companies and WCF to accelerate their work on sustainable livelihoods and risk-reduction methods for cocoa farmers.

Although the CocoaAction productivity package is designed to improve long-term productivity and income for farmers, CocoaAction companies realized that farmers in Côte d'Ivoire and Ghana would see little short term return on their investment in the productivity package as a result of the cocoa price drop in 2016.

CocoaAction companies and WCF are addressing market challenges by:

- Making additional investments to improve the long-term productivity and profitability of cocoa farming in all the major origin countries through individual company sustainability programs and pre-competitive collaboration.
- Supporting the development and expansion of markets for cocoa and chocolate and promoting responsible consumption around the world.
- Providing premium payments for certified and/or verified sustainable cocoa on top of official prices, which increase farmers' incomes and provide critical financing for the development of cocoa-growing communities.

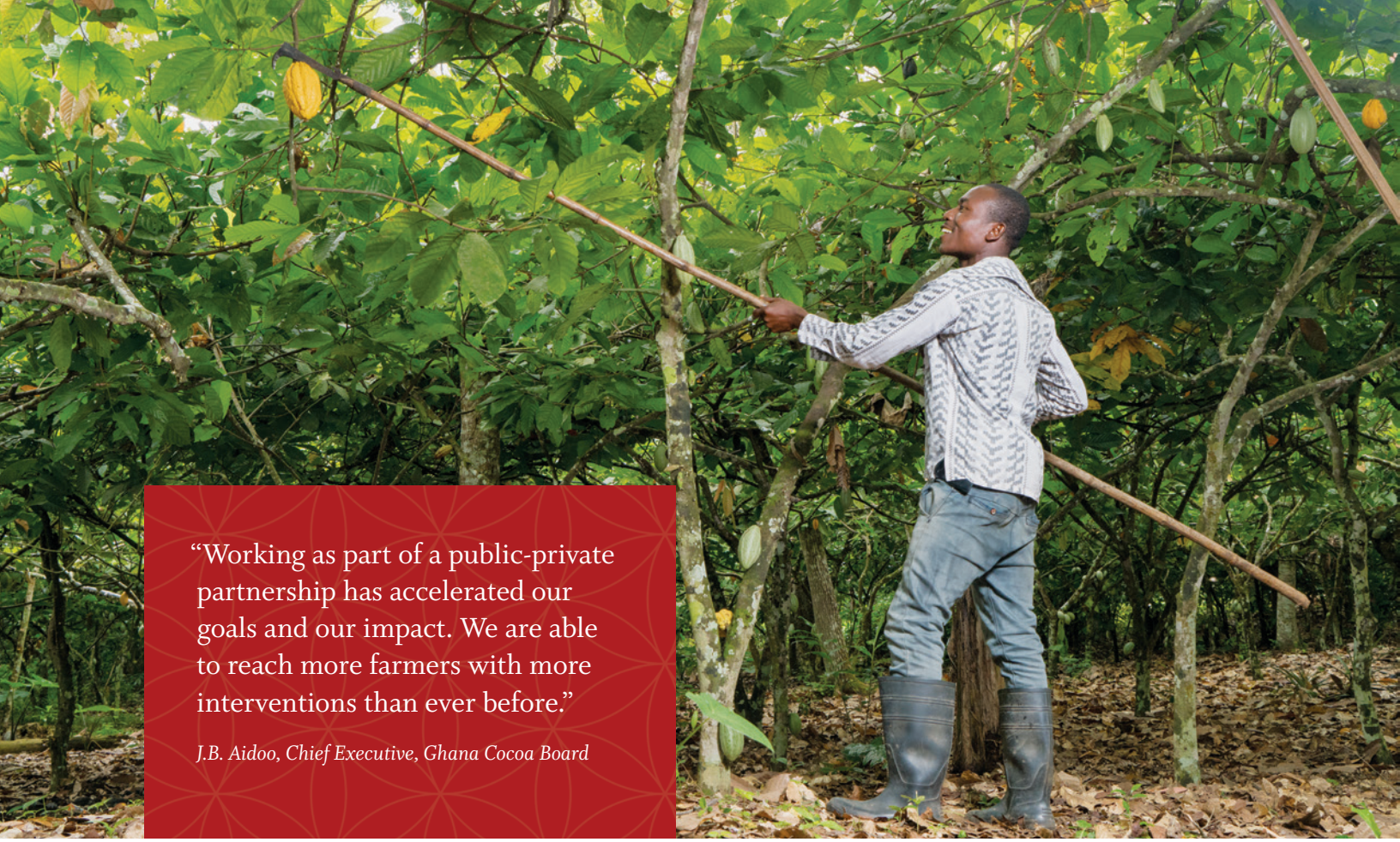
CocoaAction companies and WCF realize that further and ongoing industry collaboration is needed to strengthen the business environment for cocoa and to help secure sustainable livelihoods for cocoa farmers in Côte d'Ivoire and Ghana.

In conversations with farmers, CocoaAction companies have identified economic challenges that, at times, impede adoption of CocoaAction interventions.

For example, a Ghanaian farmer with a six-acre plot may be interested in improving his productivity using CocoaAction activities—Good Agricultural Practices, Replanting & Rehabilitation and Soil Fertility Management—but may hesitate to invest when he hears that he will experience a loss of income while implementing the work needed to improve his productivity long term.

> "The best way to create impact is to think and act at the individual farm level. Part of the CocoaAction Strategy is promoting knowledge among farmers through comprehensive training and data collection on each farm."
>
> *Andrew Brooks, Product Country Head, Olam*

In addition, the option of taking on debt to implement the productivity package is not an appealing one for some cocoa farmers. Because life insurance is not a familiar solution in West Africa, farmers may be concerned that their families will inherit their debts.



"Working as part of a public-private partnership has accelerated our goals and our impact. We are able to reach more farmers with more interventions than ever before."

J.B. Aidoo, Chief Executive, Ghana Cocoa Board

While these financial and cultural barriers may be challenging to overcome, CocoaAction companies and WCF are committed to improving farmer livelihoods as a primary objective, and are taking steps to enable cocoa sustainability and profitability for years to come. This includes developing innovative ways to provide farmers with access to financial support and other services so that they can better understand and navigate financial risks and rewards.

> "In 2016, we felt that WCF made concerted effort to engage with companies such as Blommer through the roadmap development. I think it's extremely important in collective efforts such as CocoaAction for members to be able to help shape strategy and determine priorities."
>
> *Carolin Fesenberg, Commodity Sustainability Program Manager, Blommer*

Progress in Productivity

In 2016, WCF extended the implementation of the MOUs signed with Côte d'Ivoire's Conseil du Café-Cacao and Ghana's Cocoa Board to help tackle Cocoa Swollen Shoot Virus (CSSV). In addition, IDH—the Sustainable Trade Initiative's Côte d'Ivoire soil mapping study—funded by WCF, national research institutions and other partners—was completed and enabled better understanding of soil fertility. Both efforts required strong collaborations between key national, regional and international stakeholders.

Fighting Cocoa Swollen Shoot Virus (CSSV)

Since 2015, CocoaAction companies and WCF have dedicated resources specifically to help conquer CSSV, a viral disease endemic to West Africa that was first identified in Ghana in the mid-1930s. By some estimates, the disease destroys as much as 15 percent of global cocoa production each year. CSSV's impact is felt most strongly on individual smallholder cocoa farms, where it can wipe out the cocoa trees on an entire farm and deprive farmers of most if not all of their income.

CocoaAction companies understand that because of its various strains, CSSV must be tackled at the regional level, with tailored approaches for the individual geographic regions where the disease exists.

In October 2016, WCF convened regional cocoa research scientists, government policymakers, multilateral donor institution officials and representatives of the chocolate and cocoa industry for an intensive daylong consultation in Côte d'Ivoire. The meeting attracted participants from five cocoa producing countries in West and Central Africa—Cameroon, Côte d'Ivoire, Ghana, Nigeria and Togo. The group closely examined the current status of the disease in the region, as well as progress made thus far in researching various methods to control it. Importantly, they discussed a possible strategy for a unified regional approach to fighting the disease.

Thanks to engaged governments and partnerships with CIRAD and University of Reading (UK), in 2016, CocoaAction companies and WCF developed a molecular based detection tool to help identify the many strains of CSSV that threaten cocoa trees. Through CocoaAction companies, this detection tool will be made available to Côte d'Ivoire and Ghana. In addition, CocoaAction companies have granted the University of Reading funding for a two-year project that aims to develop a protocol for screening cocoa seedling for resistance to CSSV.

> "Collaboration with WCF and various stakeholders allowed us to better understand and tackle Cocoa Swollen Shoot Virus. We are excited to see the impact on productivity and farmers' livelihoods."
>
> *Yves Brahima Koné, Director General, Le Conseil du Café-Cacao*

Completion of Côte d'Ivoire Soil Mapping

In 2015, CocoaAction companies and WCF partnered with IDH—the Sustainable Trade Initiative and le Conseil du Café-Cacao's Cocoa Fertilizer Initiative to support a soil mapping study by Côte d'Ivoire's Centre National de Recherche Agronomique (CNRA—National Agricultural Research Center). In 2016, this analysis was completed and provides an updated soil map that gives guidance for the formulation of more adapted cocoa fertilizers to help farmers restore and improve their soils and contribute to improved productivity. Please visit the IDH website to view the *final report*.

INTERNATIONAL COCOA INITIATIVE

Established in 2002 as a result of the Harkin-Engel Protocol, the International Cocoa Initiative (ICI) works with the cocoa industry, civil society and national governments in cocoa-producing countries to ensure a better future for children and contribute to the elimination of child labor.

As a leader in the issue of child labor, ICI has played a significant role in developing CocoaAction's approach to child labor through the contribution of deep experience and expertise on the issue. CocoaAction companies continued to strengthen their collaboration with the International Cocoa Initiative (ICI) throughout 2016, and ICI continued to provide technical assistance at the governance level of CocoaAction and support to CocoaAction companies.

In collaboration with ICI, a number of CocoaAction companies went through a CLMRS effectiveness review, which was developed not only for the cocoa sector but for other agricultural sectors as well. ICI's partnerships across sectors have already reached 1,139 children and women in the first year of implementation, and are expected to benefit 3,600 by 2018.

"ICI's operations expanded dramatically in 2016, as CocoaAction companies engaged us to help them implement their CocoaAction commitments. The scale-up of industry action that is now underway is a significant step forward in the fight against child labor in cocoa."

Nick Weatherill, Executive Director, ICI

The majority of this data relates to productivity interventions. In 2016, companies began to align their work in cocoa-producing communities with CocoaAction, and therefore have not yet gathered sufficient data to collectively report on activities related to the Community Development programmatic area and pillars.

Aligning on Community Development

In 2016, in addition to productivity data collection, CocoaAction companies prioritized adjusting their individual sustainability initiatives to further align with the CocoaAction community development activities focused on Child Labor Reduction, Primary Education and Women's Empowerment.

Working in Supply Chains and in Communities to Prevent Child Labor

In 2016, reducing child labor remained a primary driver of non-competitive industry and cross-sector collaboration in the cocoa sector. CocoaAction companies' "dual approach" to the problem, reviewed by the International Cocoa Initiative (ICI), aims to identify and respond to reported child labor in the cocoa supply chain while tackling its root causes in communities. Through CocoaAction companies' implementation of child labor monitoring and remediation systems (CLMRS), 15,000 farmers and supply chain members have been engaged to monitor for and report instances of child labor. In 2016, through CocoaAction companies' partnerships with the ICI and other organizations at the community level, the reach of CLMRS extended to 55,000 farming households in Côte d'Ivoire and expanded to Ghana. In communities, CocoaAction companies are working to increase awareness of child labor and its effects, creating alternatives for children through improved access to primary education and improving child protection capabilities through Community Child Protection Committees (CCPCs).

> "It is extremely exciting and rewarding to see the purpose of our partnership—the CocoaAction vision—come to life. This first year of measurement is a critical advancement toward a more sustainable cocoa sector."
>
> *J.B. Aidoo, Chief Executive, Ghana Cocoa Board*

Because child labor is both a symptom and a cause of poverty, CocoaAction companies also provided 1,500 women and 660 men with support for additional income-generating activities. Increased income can support the hiring of laborers to work on their farms, or cover school-related expenses for their children.

"CocoaAction has accelerated our drive, our understanding and our actions around child labor."

Taco Terheijden, Director of Cocoa Sustainability, Cargill

"Last year we were proud to be involved in the development of the Results Framework and indicators; this year, we are thrilled to see them put into action. We are not only providing interventions to improve farmer livelihoods, but also measuring their effectiveness and constantly recalibrating our approach."

Yves Brahima Koné, Director General, Le Conseil du Café-Cacao

In addition, in partnership with ICI, a number of CocoaAction companies mobilized and equipped labor groups to undertake some of the tasks that are traditionally done by younger children. These labor pools are filled with workers who offer their services to farmers at a subsidized or discounted rate. This boosts local workers' income, while serving as an alternative to child labor.

CHILD LABOR IN COCOA COORDINATING GROUP PRINCIPALS MEETING

On June 22, 2016, the U.S. Department of Labor hosted the Child Labor in Cocoa Coordinating Group (CLCCG) Principals Meeting to discuss progress and challenges under the Harkin-Engel Protocol's Framework of Action. Then-Acting WCF President Tim McCoy provided remarks highlighting the need for continued public-private partnerships to combat and prevent child labor, despite the progress made since 2010—when the governments of Côte d'Ivoire and Ghana, U.S. Congressman Engel and Senator Harkin and the chocolate and cocoa industry joined hands to form the CLCCG Framework of Action. Read Tim McCoy's full remarks here. WCF serves as the chocolate and cocoa industry's point of contact and spokes-organization for the CLCCG process.

Empowering Women in Cocoa Producing Countries

In both Côte d'Ivoire and Ghana, long-standing cultural traditions and social constraints often prohibit women from assuming leadership roles and contributing to their families' incomes. Despite accounting for nearly 50 percent of pre- and post-harvest labor associated with cocoa production, in Côte d'Ivoire women represent only 5 percent of members of farmer or community organizations, and make up just 8 percent of community governance structures. In implementing CocoaAction women's empowerment activities, therefore, CocoaAction companies and WCF are faced with the challenge of producing short-term results against deep-seated cultural forces.

With expertise and insight provided by partner organizations such as CARE International, which places empowering women and girls at the center of its approach to end global poverty, WCF and a number of CocoaAction companies are raising the profile of women in cocoa-growing communities and addressing their needs holistically. In addition to community needs assessments, some CocoaAction companies have conducted gender assessments to better understand the roles of women in cocoa-growing communities.

> "More women are assuming leadership roles and participating in income-generating activities, but it is difficult to change 100-year traditions in five years of CocoaAction work."
>
> *Patience Nambo, Gender Specialist, World Cocoa Foundation*

WCF staff members work with CocoaAction companies to help align their existing sustainability initiatives with the agreed-upon CocoaAction women's empowerment activities. In Côte d'Ivoire alone, three CocoaAction companies are supporting 1,157 women to undertake income-generating activities.

In 2016, CocoaAction companies also continued work with Côte d'Ivoire and Ghana Village Savings and Loans Associations (VSLAs)—first pioneered by CARE International in 1991. While not an integrated piece of the

CocoaAction strategy, VSLAs complement and amplify CocoaAction interventions, and have proven to be an impressive model for empowering women in cocoa communities.

In addition, WCF helps develop policies to empower women in cocoa-producing communities in Côte d'Ivoire and Ghana by liaising with government agencies. In 2016, WCF worked with CocoaAction companies and farmers to implement field-based activities. Through the implementation of these activities, CocoaAction companies and WCF collected learnings that have allowed them to bring an informed perspective to conversations about the value of including women in an industry approach to improving sustainability.

CocoaAction companies' efforts in women's empowerment have laid the groundwork for critical conversations with the governments of Côte d'Ivoire and Ghana, as well as a *Global Conference on Women in Cocoa*, which took place in early 2017, on the importance of women's empowerment to improving farmer livelihoods and building a more sustainable cocoa sector. The conference focused on women's economic empowerment and financial inclusion; land tenure/land rights; and child protection. By collaborating with government agencies on women's empowerment, CocoaAction companies and WCF can accelerate change and challenge other partners to make progress on this issue.

> "CocoaAction companies understand that women's empowerment is not merely a nice thing to do—it's the smart thing to do. This shift in industry's mindset is helping to make the business case for women's empowerment to the governments of cocoa-producing countries."
>
> *Youssouf Ndjoré, Cocoa Sustainability Director, CARE International*

As CocoaAction companies and WCF build on 2016 progress and continue the CocoaAction learning journey, we encourage you to reach out with feedback. Please contact WCF by emailing *WCF@Worldcocoa.org*.

Company Profiles

Barry Callebaut Group is the world's leading manufacturer of high-quality chocolate and cocoa products, and has been dedicated to this business for more than 150 years. The Group runs more than 50 production facilities worldwide and employs a diverse and dedicated global workforce of more than 9,000 people. The Barry Callebaut Group serves the entire food industry, from industrial food manufacturers to artisanal and professional users of chocolate, such as chocolatiers, pastry chefs, bakers, hotels, restaurants or caterers. The two global brands catering to the specific needs of these Gourmet customers are Callebaut® and-Cacao Barry®. The Barry Callebaut Group is committed to sustainable cocoa production to help ensure future supplies of cocoa and improve farmer livelihoods. It supports the Cocoa Horizons Foundation in its goal to shape a sustainable cocoa and chocolate future.

Blommer Chocolate Company is the largest cocoa processor and ingredient chocolate supplier in North America. Founded in 1939, the family-owned and operated company has more than 800 employees and five strategically located manufacturing facilities in North America and China. The company provides comprehensive business solutions for domestic and international customers of all sizes in the confectionery, baking and dairy industries. Among Blommer's core competencies are cocoa bean processing, chocolate manufacturing, commodity risk management, and product and process R&D. The company is a leader in advancing sustainable cocoa farming as a founding member of the World Cocoa Foundation, a member of the CocoaAction sustainability initiative, and through its privately managed farmer programs in Côte d'Ivoire, Indonesia and Ecuador.

Cargill Cocoa & Chocolate offers its customers quality products and services they trust to help them thrive, today and in the future. Cargill consistently delivers a wide range of products—including cocoa powder, liquor and butter, chocolates, fillings and coatings—to help customers stand out from the crowd. Day-to-day the company works to the highest safety standards and offers insight-driven price risk management and sustainable cocoa services. For recipe development and optimization, Cargill has seven specialized Application Centers around the world. The company's insights on market and consumer trends, combined with its innovation support and consistent performance, make Cargill a proactive partner in all major consumer markets. Cargill customers also benefit from bean sourcing and research capabilities in key origin countries, including Brazil, Cameroon, Côte d'Ivoire, Ghana, and Indonesia. With a team of more than 3,000 passionate cocoa and chocolate experts in 35 locations, connected to 150,000 Cargill employees around the globe, the company provides unique knowledge and proactive services across five continents, built on a foundation of 150 years of experience.

The Ferrero Group is present with more than 40,000 people in 53 countries, with 22 production plants and 9 agricultural companies in Chile, Argentina, Bulgaria, Georgia, South Africa, Australia, Turkey, Italy and Serbia. Ferrero products are present and sold, directly or through authorized retailers, in more than 160 countries around the world. Since the beginning, in Ferrero, innovation combines modern methods with ancient passion, permeating all steps

of the value chain, from research and development to the final product. Nutella, Ferrero Rocher, Raffaello, Tic Tac and the Kinder line (Kinder Surprise, Kinder Joy, Kinder Bueno, Kinder Chocolate, Kinder Milk Slice, Kinder Pingui, Kinder Delice) are some of the Ferrero products best known and appreciated by consumers all around the world.

The Hershey Company, headquartered in Hershey, Pennsylvania, U.S., is a global confectionery leader known for bringing goodness to the world through its chocolate, sweets, mints and other great-tasting snacks. Hershey has approximately 22,000 employees around the world who work every day to deliver delicious, quality products. The company has more than 80 brands around the world that drive more than $7.4 billion in annual revenues, including such iconic brand names as Hershey's, Reese's, Hershey's Kisses, Jolly Rancher, Ice Breakers and Brookside. Building on its core business, Hershey is expanding its portfolio to include a broader range of delicious snacks. The company remains focused on growing its presence in key international markets while continuing to extend its competitive advantage in North America. For more than 120 years, Hershey has been committed to operating fairly, ethically and sustainably.

Mars, Incorporated is a family-owned business with more than a century of history making diverse products and offering services for people and the pets people love. Our global headquarters is in McLean, Virginia, U.S. We operate in over 80 countries worldwide and our net sales add up to almost $35 billion a year. Our global business manufactures some of the world's best-loved brands, including: M&M's®, SNICKERS®, TWIX®, MILKY WAY®, GALAXY®, DOVE®, EXTRA®, ORBIT® and SKITTLES®, Our more than 85,000 Associates are guided by The Five Principles: Quality, Responsibility, Mutuality, Efficiency and Freedom. We are committed to creating enduring, mutual benefits for us and our stakeholders while operating sustainably. On 6 September 2017, we introduced our new Sustainable in a Generation plan. The plan focuses on areas where Mars can impact change on some of the world's biggest problems, as defined by the UN Sustainable Development Goals. The plan includes a set of far-reaching goals and ambitions underpinned by science and a determination to drive impact throughout the extended supply chain including cocoa.

Mondelēz International, Inc. is a global snacking powerhouse, creating delicious moments of joy in 165 countries. Mondelēz International is a world leader in biscuits, chocolate, gum, candy and powdered beverages, with billion-dollar brands such as Oreo, LU and Nabisco biscuits; Cadbury, Cadbury Dairy Milk and Milka chocolate; and Trident gum. Mondelēz International's ultimate goal is to sustainably source all the company's cocoa supply, mainly via Cocoa Life, which aims to reach more than 200,000 farmers across six countries, benefiting more than a million people. By working in partnership with farmers, NGOs, suppliers and government institutions, Cocoa Life is part of Mondelēz International's Impact for Growth, which urges employees, suppliers and community partners to join together to develop new approaches that can have a positive impact on the planet and its people. The Impact for Growth focuses on four key areas where the company can make the greatest impact: well-being snacks, sustainability, community and safety.

Company Profiles

Nestlé is the world's leading nutrition, health and wellness company. The company employs more than 335,000 people and has 436 factories in 86 countries. Nestlé products are sold in 197 countries. Nestlé is the worldwide leader in product categories such as soluble coffee, infant nutrition, bottled water, condensed and evaporated milk, ice cream, as well as chocolate and malt drinks, and culinary. Nestlé's confectionery brands include Kit Kat, Nestlé and Toll house. To build a business capable of both delivering superior shareholder value and helping people improve their nutrition, health and wellness, Nestlé takes its Creating Shared Value approach to the business as a whole. In addition to nutrition, this approach focuses on water scarcity—a very serious issue in many parts of the world—because water is quite simply the linchpin of food security. Creating Shared Value also focuses on rural development because the overall well-being of farmers, rural communities, small entrepreneurs and suppliers is intrinsic to the long-term success of Nestlé's business. It is incorporating CocoaAction into its cocoa sustainability strategy, the 'Nestlé Cocoa Plan.'

Olam International is a leading agri-business operating across the value chain in 70 countries, supplying various products across 16 platforms to more than 16,200 customers worldwide. From a direct sourcing and processing presence in most major producing countries, Olam has built a global leadership position in many of its businesses. Headquartered in Singapore, Olam has built its cocoa business by combining unique and unparalleled strengths at origin with market presence as well as research, information, analysis, and futures market expertise. In October 2015, the company created a new entity, Olam Cocoa, following the acquisition of ADM Cocoa. In combining a leader in cocoa bean sourcing with one of the world's leading cocoa processors, Olam has formed a fully integrated cocoa business that supplies cocoa beans and cocoa products, establishing a new dynamic in the industry. The Olam team is a highly motivated group of 2,400 chocoholics who believe in their business and the cocoa and chocolate industry. The company supports all relevant organizations and has Board representation on many bodies including the Federation of Cocoa Commerce, World Cocoa Foundation, European Cocoa Association and the Cocoa Association of Asia. This year, Olam was featured in Fortune "Change the World" list of 50 global companies aligning social and environmental impact with their economic objectives.

ANTITRUST STATEMENT

The nine CocoaAction companies recognize that the sustainability challenges of the cocoa sector—mature and vulnerable plants, depleted soils, lack of good agricultural practices, poverty, reported child labor, and increased competition from other crops—require swift action and a radically different approach grounded in partnership, collaboration and alignment.

CocoaAction and its member companies are mindful of the constraints of the antitrust laws. CocoaAction participants shall not enter into discussions, agreements or concerted actions that may have as their object or effect the restriction of competition. This prohibition covers the exchange of competitively sensitive information including, but not limited to, information concerning individual prices, production, sales, capacities, costs, rates, coverages, market practices, claims settlement practices, company level investments, or any other competitive aspect of an individual company's operation.

Any efforts made by CocoaAction to promote sustainable and enhanced product supply will not limit individual activities or efforts by member companies to the same ends.

World Cocoa Foundation

We welcome your engagement and feedback.

Please reach out to us at any of our offices or email *WCF@Worldcocoa.org*.

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