

Cocoa Traceability Case Study

MONDELÉZ INTERNATIONAL

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Disclaimer

The opinions expressed in this publication are those of the authors. They do not purport to reflect the opinions or views of the national platforms for sustainable cocoa in Europe and/or their members, nor the stakeholders who were interviewed in the process of developing it.

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1. Introduction

Improving the transparency and traceability of the cocoa value chain¹ is an important means of improving accountability and sustainability of the chocolate and cocoa sector. For example, full traceability from farm level to first purchase point is one of the commitments of the Cocoa & Forests Initiative. This initiative is a public-private partnership aiming to end deforestation and restore forest areas. It was signed in November 2017 by the governments of Ghana and Côte d'Ivoire and a group of 35 companies. A similar framework, the Roadmap to Deforestation-free Cocoa², was signed in Cameroon in January 2021 by the government, companies, farmer organizations and NGOs, and aims to ensure the traceability of 100% of the cocoa supply from the farmgate via the warehouse to the port of exit by the end of 2025.

This is one of a series of four case studies that were developed to provide a deeper insight into the role of specific cocoa supply chain actors in the context of traceability. It complements our [Technical Brief on Cocoa Traceability](#), a publication developed to contribute to the global debate on cocoa traceability by providing clarity in defining traceability, what it can help to achieve, and how traceability and transparency in the cocoa sector could be further improved.

This series of case studies aims to provide details on (1) the existing traceability systems and the objectives of various supply chain actors sourcing cocoa from Cameroon, Ghana and Côte d'Ivoire; (2) the reliability and protection of data in traceability systems; (3) how traceability systems operate to provide accountability regarding sustainability commitments. Each case study focuses on a specific theme relevant to the role of that actor in the cocoa supply chain including certification body, trader, primary processors and consumer brand. It considers their approach to traceability, such as mass balance and segregation, and the technology used by their traceability systems (for example, SAP and blockchain). This case study focuses on the mass balance approach to traceability as used by Mondelēz International.

This case study comprises five sections. In **section 2** we introduce the actor, Mondelēz International, and its role in the cocoa supply chain. In **section 3** we describe the Mondelēz International traceability system by focusing on three characteristics: 1. information about the origin of cocoa entering the supply chain, 2. links between sustainability characteristics, both at origin level and at later steps in the value chain, and cocoa lots through their different stages of processing and 3. transmission of data along the supply chain. In **section 4**, we outline the challenges to traceability as identified by Mondelēz International. In **section 5** we investigate the potential of a mass balance approach to ensure accountability on sustainability claims.

This case study was jointly commissioned by IDH, the Sustainable Trade Initiative and the German Initiative on Sustainable Cocoa (GISCO) and obtained funding from the UK-funded Partnerships for Forests (P4F) programme in the context of the Cocoa & Forests Initiative.



1. In this document we use the term "value chain" whenever we could use both "value chain" and "supply chain". The term value chain is preferred as it better reflects the perspective of all actors involved.

2. <https://www.idhsustainabletrade.com/uploaded/2021/01/20210111-RDFC-2-Pager-2-Final.pdf>

2. Mondelēz International and its supply chain

Mondelēz International is one of the largest snack companies whose portfolio includes several chocolate and cookie brands including Milka, Toblerone, Côte d'Or, Cadbury, and Oreo. Mondelēz International sources their cocoa and cocoa derived products through a mass balance system.

Cocoa Life, Mondelēz International's global cocoa sustainability program, addresses sustainability challenges in the cocoa sector across six cocoa-growing countries: Ghana, Côte d'Ivoire, Indonesia, Dominican Republic, India and Brazil.

Cocoa Life aims to tackle the complex challenges that cocoa farmers and their communities face including climate change, gender inequality, poverty and child labour. By end of 2020, nearly 70% of the cocoa Mondelēz International sources for its chocolate brands came from the cocoa growing communities supported by the Cocoa Life program. The company's 2025 target is to extent the Cocoa Life program to all Mondelēz International chocolate brands and ultimately to ensure that their entire cocoa volume is sustainably sourced.

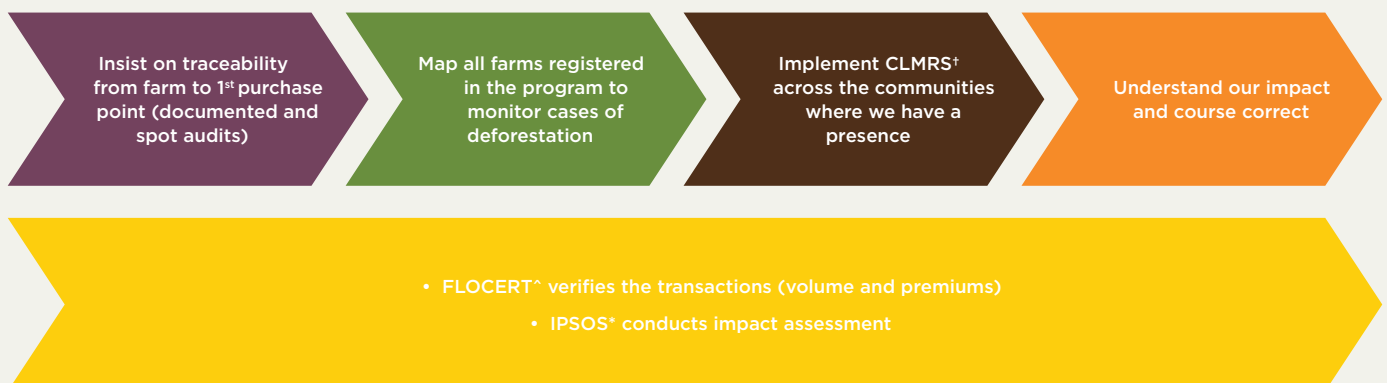
3. Mondelēz International's traceability system

According to Mondelēz International, traceability is the ability to know where, by whom, and under what conditions the cocoa is produced. Mondelēz International recommends a traceability system that provides visibility of the supply chain and is backed up by accountability of each of the supply chain actors.

By identifying the farmers and farming practices behind the cocoa, Mondelēz International aims to address the risk of child labor and deforestation in the supply chain. For this

reason, Mondelēz International is focusing on the balance between traceability in producing countries and the need for transparency. Such transparency allows Mondelēz International to tackle the root causes of these issues instead of moving away from a supply chain at risk. Mondelēz International insists on traceability from the farms to the first purchase points by their tier one suppliers³ and implements this approach in their direct supply chain.

MONDELÉZ INTERNATIONAL'S TRACEABILITY SYSTEM



3. Mondelēz International's tier 1 suppliers are couverture producers or bean exporters, their tier 2 suppliers are the cooperatives who supply to the tier 1 suppliers.

⁺ Child Labour Monitoring and Remediation System

[^] FLOCERT is a subsidiary of Fairtrade International which acts independently to ensure the quality and credibility of the Fairtrade certification system.

^{*} Global market research agency

COCOA TRACEABILITY CASE STUDY - MONDELÉZ INTERNATIONAL

3.1 Dimension 1: How is origin information obtained and documented?

In a typical Mondelēz International supply chain in Côte d'Ivoire, the first step begins with the farmer belonging to a cooperative or farmer's organization, implying that the farmer is identified and registered. Data collection begins with registration of the farmer's identity, demographic data and details about the farm and its location.

The cocoa is harvested, fermented and dried by the farmer, then taken to the main depot of his cooperative. The second step of data collection occurs here, where information about volumes delivered to the co-operative and the price paid to the farmer are registered. In Côte d'Ivoire, about 40% of Ivorian cocoa farmers are registered with cooperatives, while 60% remain unorganized (i.e. not registered with a cooperative) and may be unknown.

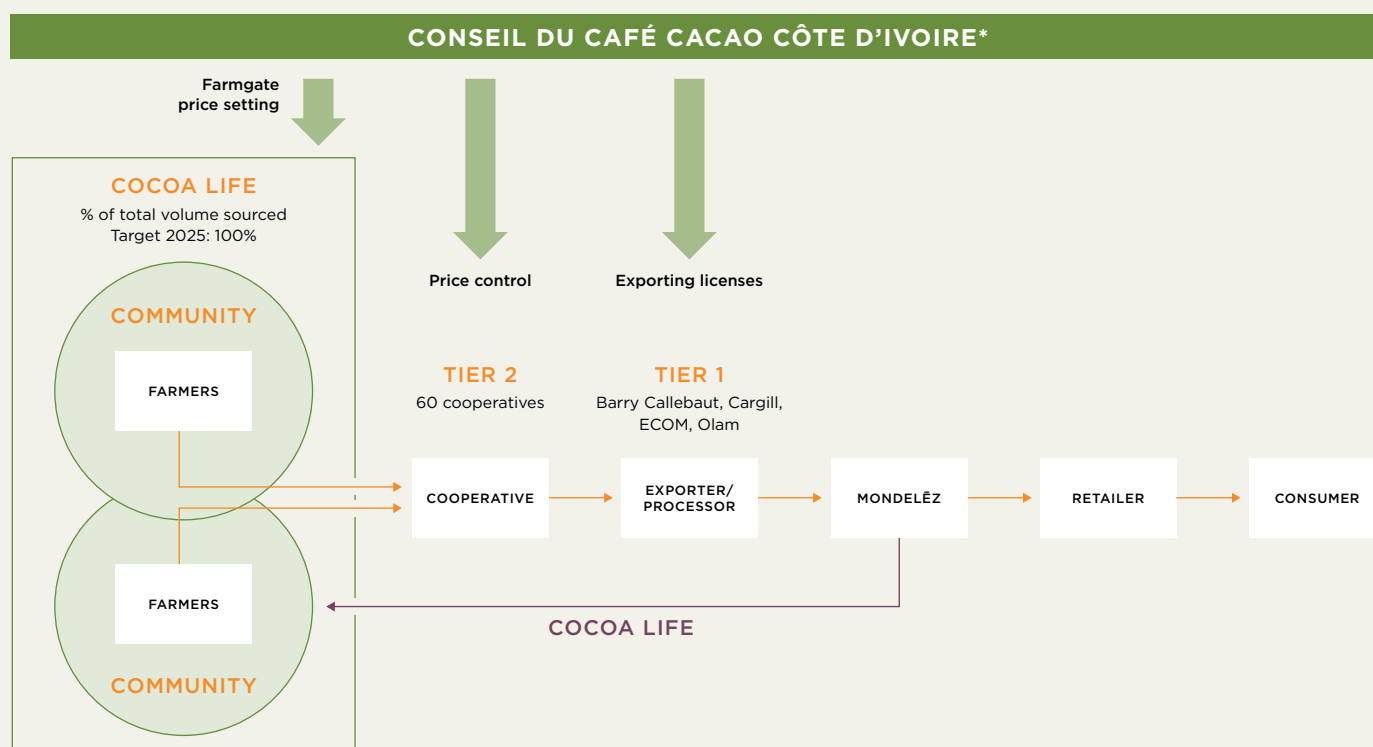
The third step in the supply chain is the cooperative (tier 2 supplier) selling the cocoa beans to the tier 1 suppliers. The third level of data collection occurs when details about the cocoa bought by the tier 1 suppliers are recorded. Depending on the tier 1 supplier infrastructure, the cocoa beans will either be processed locally, or shipped to a processing plant in Europe.

Once the cocoa enters the premises of the tier 1 suppliers' local premises, Mondelēz International data collection process is complete. Cooperatives capture the volume they have received from Cocoa Life registered farmers and sold to Mondelēz International's tier 1 suppliers into Flotis (FLOCERT's online verification platform). Mondelēz International's tier 1 suppliers confirm the volume they buy from the cooperatives as Cocoa Life and also what they sell to Mondelēz International. It is critical that the volume Mondelēz International claims as Cocoa Life matches with the volume the tier 1 suppliers have bought from Cocoa Life registered cooperatives/farmers and that has been verified by FLOCERT.

Mondelēz International's cocoa supply chain in Ghana looks similar to that in Côte d'Ivoire. The key difference is that there are no cooperatives involved in Ghana. Mondelēz International and their tier 1 suppliers work with local buying centres (LBC) or with farmers unions as their tier 2 supplier.

FLOCERT traces and verifies the flow of cocoa from Cocoa Life communities into the supply chain. It also confirms that the cocoa farmers receive the benefits of the Cocoa Life program, such as premium payments.

MONDELEZ COCOA LIFE: COCOA SUPPLY CHAIN IN CÔTE D'IVOIRE



* The Conseil du Café-Cacao is a state agency created in December 2011, responsible for the regulation, stabilization and development of the coffee and cocoa sector in Côte d'Ivoire

3.2 Dimension 2: How are sustainability characteristics linked to supply origin data?

Deforestation

Mondelēz International needs to understand where the cocoa is produced to ensure that it does not come from a protected area where cocoa farming is illegal, and that it does not lead to further deforestation. As part of its Cocoa & Forests Initiative (CFI) commitment, Mondelēz International has developed a CFI action plan based on 3 pillars: (1) forest protection and restoration, (2) sustainable production and farmer's livelihoods, and (3) community engagement and social inclusion.

To respond to this CFI commitment, Mondelēz International mapped 37,911 farms in 2018 and 2019, referencing them on the official maps of protected areas in Côte d'Ivoire provided by the Ministry of Water and Forests (MINEF), to ensure that the cocoa is not coming from protected areas where cocoa production is illegal. The farm mapping is also used to assess deforestation risks in the supply chain, and to ensure the traceability of the cocoa beans from the farms to the first point of purchase.

Mondelēz International's deforestation risk assessment methodology was piloted in Côte d'Ivoire. This approach first concentrates on assessing the impact from already established farms, by looking at all farms and assessing farm density and proximity to different types of forests in order to visually highlight any potential negative impact from farming. Based on this annual risk assessment, Mondelēz International has conversations with NGO partners, suppliers and government about how to reverse potential negative effects or mitigate further impact. For instance, farmers at risk are being removed from their supply chain and Mondelēz International intends to report these farmers to the local authorities once they have socio-economic safeguards in place to protect illegal farmers from being relocated without any support. Mondelēz International is also an active member of a working group coordinated by WCF and is working on a standard deforestation risk assessment tool to align one methodology with one tool to be used by all.

Child labour

Children and their families in the cocoa growing areas of Ghana and Côte d'Ivoire face the realities of poverty and slow rural development, including lack of education infrastructure, food insecurity, lack of access to clean drinking water, and poor health services. Mondelēz International addresses these challenges and human rights risks, including child labor, through Cocoa Life. Recognizing that the risk of child labor is a symptom of underlying systemic issues which affect the cocoa supply chain but reach far beyond it, including poverty and poor infrastructure, the Cocoa Life program's holistic approach seeks to address these systemic root causes.

In Côte d'Ivoire and Ghana, where child labor risk in the cocoa sector is high, Mondelēz International is working with local authorities and partners to roll out community-based Child Labor Monitoring and Remediation Systems (CLMRS). Mondelēz International is working with local authorities and partners to have a CLMRS in place in all Cocoa Life communities in Ghana and Côte d'Ivoire by 2025. According to Mondelez International's Global Progress Dashboard published at the end of 2020, 649 communities in their Cocoa Life program were covered with a CLMRS or equivalent system.

In a community-based CLMRS, all data and learnings are shared with authorities to inform policy, particularly related to constraints on access to education. Identified child protection cases are referred to social workers.

In the European Union, the world's largest consuming market for West African cocoa, Mondelēz International has joined forces with peer and supplier companies as well as NGOs to amplify its voice. Together, these organizations are calling on the EU to strengthen human rights and environmental due diligence requirements of companies in global cocoa supply chains, and implement a smart policy mix to support the necessary environments in producing countries for the respect of human rights, including those of children.

Living income

A recent paper⁴ published by Wageningen University and Mondelēz International argues that promises by individual actors of quick and easy solutions that can solve the living income challenge are counterproductive. Instead, a sector-wide - and ideally a cross-sector - targets-based approach should be considered. This could provide a framework to define meaningful contributions for everyone within the sector with targets for tangible contributions by all actors. As of yet, there is little to no alignment between national plans and industry efforts.

4. No silver bullets: closing the \$10 billion income gap in cocoa calls for cross-sector action, 2020, Wageningen University, Mondelez International

COCOA TRACEABILITY CASE STUDY - MONDELÉZ INTERNATIONAL

It is estimated that between Ghana and Côte d'Ivoire, up to 2,000,000 smallholder farming families produce cocoa⁵. The income gap between the average income of those farmers and recent living income benchmarks equals about \$5.21 billion US per year, which is similar to the total combined income of both nations from all cocoa bean exports in 2018 – estimated at roughly \$5.31 billion US⁶. This amount increases to about \$10 billion US per year to achieve a living income not for the average but for a clear majority of households.

Mondelēz International estimates, using Cocoa Life data from Ghana (2019), that only about one-third of farming families have sufficient access to land and other agricultural resources. For them, it is easier to earn a living income from cocoa. However, for the majority of farmers with below average access to resources, earning a living income is extremely challenging. Even a doubling of market prices would only lift an estimated 17% of additional farmers to a living income. This is despite their average income exceeding the living income benchmark established by the Living Income Community of Practice. As there are a lot of farmers who produce very little cocoa, even if cocoa prices were higher, they would not make much more money as they do not have much to sell. Increasing the price of cocoa alone is not the solution but stabilizing and improving prices is still an important step towards income improvement, especially if done at a national scale and in support of national economic development plans as defined by local governments.

To support farming households working with Cocoa Life, Mondelēz International pays an additional premium to the regular cocoa market price and offers activities which are meant support the capacity of households to increase their income earning potential. Depending on the location and supply chain, this can include: training and provision of services to increase farm production, training and start-up support for non-cocoa businesses, payment for ecosystem services, or the provision of plant material for agroforestry and food crop production.

Mondelēz International works with IPSOS, a global market research agency, to assess its impact through the Cocoa Life program. To measure changes in living income, IPSOS selects a representative sample from a complete list of Cocoa Life registered farmers and follows it for 3 years. Results between 2015-2018 show that cocoa income from Cocoa Life registered farmers grew by 6% in some regions and declined by 26% in other regions. Currently, about 24% of households working with Cocoa Life in Ghana and 10% of households in Côte d'Ivoire achieve a living income, with an - on average - about 15% higher net household income than farmers not working with Cocoa Life. This shows that a holistic and targeted approach towards closing the living income gap is needed⁷.

3.3 Dimension 3: How is traceability data transferred along the supply chain and verified?

Since 2015, Mondelēz International has worked with FLOCERT for third party verification and increased transparency within the Cocoa Life program. FLOCERT traces and verifies the flow of cocoa from Cocoa Life communities into the supply chain. It also confirms that cocoa farmers are receiving the benefits of the program, such as premium payments.

Mondelēz International is in the process of developing a comprehensive dashboard to reflect the progress that supply chain actors involved in their supply chain are making.



5. Ibid. 5

6. Ibid. 6

7. <https://www.cocoalife.org/-/media/CocoaLife/en/cocoa-life-annual-report-2018/6-7/index.html>

4. How does this traceability system provide accountability on sustainability commitments?

4.1 Rationale behind Mondelēz's adoption of a mass balance approach

Mondelēz International has opted for a mass balance approach to sourcing cocoa. Because cocoa is transported and processed in large quantities, it is very expensive and time consuming to keep beans grown by Cocoa Life farmers separate from those grown by other farmers. This is why Mondelēz International and many other global chocolate companies and certification organizations use mass balance to source cocoa (and some other ingredients) sustainably.

Mondelēz International considers implementation of physical traceability to be an expensive option which redirects money that could potentially benefit farmers. In the company's opinion, the most powerful data to drive improvements come from the beginning of the supply chain: in knowing by whom, where, and how cocoa has been produced. Data that allows identification of which product the cocoa was used for would add to the consumer story but would not add to sustainability improvements on the ground. Investing to improve physical traceability would not benefit the smallholder farmers, who Mondelēz International believes should be the main priority of the sector. They also believe that a focus on physical traceability as the solution for sustainable cocoa sourcing could become an excuse for neglecting systemic industry failures and potentially allow some businesses to deny any responsibility for wider sectoral problems.

4.2 Mondelēz's prospects for enhanced traceability

Adapted Mass balance approach

Mondelēz International is exploring how it can contribute to a mass balance system where only sustainable cocoa lots can be mixed together, instead of the current practice of mixing with conventional cocoa. This requires suppliers to have the same level of traceability from the farm to the first purchase point, and a minimum set of common requirements for sustainable cocoa, especially around due diligence to address child labour risk and deforestation free cocoa. Such an approach should provide confidence to consumers without absorbing too much of the value available across the supply chain. Mondelēz International believes it is essential to prioritize investment in sustainability. Many issues compete for the same resources, and segregating cocoa should not be a top priority given more urgent areas for improvement.

Cocoa management system and the emergence of the Regional African standard DARS 1000-2

Mondelēz International envisages collaboration with the governments of Ghana and Côte d'Ivoire on the national cocoa traceability systems being developed. Mondelēz International believes this will be valuable because having a standardized, centralized national system at the country of origin will lead to a system that is used by all the actors in the cocoa supply chain. It will result in a single data source that is easier to manage and negotiate and provide equal transparency to all actors. It would give the sector the assurance needed for both the direct and indirect supply chains.

According to Mondelēz International, the emerging Regional African Standard DARS 1000-2 could also provide the necessary incentives to start working on sector wide cocoa management systems at regional or local level.

5. Challenges to traceability identified by Mondelēz International

Unorganised farmers

In Côte d'Ivoire, only 2 out of 5 farmers are allegedly part of a cooperative. The other 3 are so-called unorganized farmers. While the proportion of farmers in cooperatives increases every year, the unorganized farmers are challenging to be included in a traceability system. Through Cocoa Life, Mondelēz International is working with partners to identify non organized farmers and invite them to join a farmers organization. This will increase transparency across the sector.

Demand for physical traceability

Mondelēz International is concerned when hearing that physical traceability is a critical requirement to make supply chains sustainable. They consider that physical traceability is inefficient and challenging to scale-up.

"In an ideal world, yes, we would love to have supply chains that are fully segregated where I know the beans coming from that cocoa farm ends up in my product. But we know that it is not realistic for the scale we have, and the costs associated with physical traceability do not benefit the farmers and do not solve the root causes of sustainability issues."

Cédric van Cutsem, Associate Director Cocoa Life Program, Operations, Mondelēz International



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