

Photograph of cocoa farmer Yaa Faustina in Edwinase, Ghana
Credit: Francis Kokoroko / Fairtrade / Fairpicture



Summary Paper: Empowering Cocoa Cooperatives through Data Ownership

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Introduction

As sustainability and due diligence regulations tighten globally, cocoa supply chain actors face growing demands for high-quality, transparent data. This report summarises findings from a feasibility study on union-managed data systems in Ghana's cocoa sector and outlines concrete actions for supply chain actors to support a fairer and more effective data ecosystem.

Fairtrade and Mondelēz International collaboration

The Cocoa Cooperatives Organisational Strengthening Programme (CCOSP) Phase II, a collaboration between Fairtrade Foundation, Fairtrade Africa and Mondelēz International, works with Ghanaian cocoa unions on accelerating their professionalisation. Pillar 2 of the programme aims to build the expertise and capacity of unions to manage their own data, help compliance with emerging legislation and eventually monetise their membership data. This feasibility study, commissioned by Mondelēz International and led by Fairtrade, took place in 2024 and incorporated findings from the nine unions participating in CCOSP.

The data management context for cocoa cooperative unions

“We want to reach the point where we don't have to call anyone to share our own data with us”

Cocoa union representative

Cocoa cooperative unions (hereafter referred to as unions) in Ghana operate in a challenging environment that limits their ability to collate, manage and sell data into the supply chain. This study focused on 9 unions representing 32,393 farmers.

Over 50% lack reliable internet, hindering timely data collection and real-time sharing. **Digital infrastructure** is often basic, with constrained budgets limiting hardware and software availability.

Data quality was a major concern for unions. While most used Microsoft Excel for management,

inconsistencies in data validation practices were common. And while most unions in the feasibility study had previously received some **training on data management**, 4 of 9 self-scored their staff data literacy level as insufficient.

In terms of **governance**, two thirds of unions had designated data personnel and most had formal policies in place. However, leadership involvement in data decisions varied, affecting prioritisation and strategy. Furthermore, **data protection compliance** was uneven.

The requests made of unions are **frequent** and often **duplicative**, which takes time from other duties and causes considerable frustration. In some cases, unions don't then have access to the information they have provided into the supply chain. This lack of access contributes to the overarching power dynamic where smallholder farmers and unions are at an **information disadvantage** relative to other actors in the supply chain, which reinforces supply chain power dynamics.

The result is that only one third of unions (3/9) in our study currently meet international data requirements. The lack of professional and effective upstream data management has ripple effects across value chains. Downstream actors, such as cocoa traders and chocolate manufacturers, often engage additional data collection and cleaning services to improve data reliability. Despite those costly interventions, doubts remain when upstream and downstream actors do not connect.

Unions are performing better where there is **budget for dedicated data personnel**. Investment levels strongly correlate with data management capabilities. Unions with higher levels of investment also demonstrate better internet connectivity and have invested in more suitable hardware.

In spite of these challenges, some unions are taking huge steps forward in advancing themselves on data management. We learned that one third of unions in the study **consistently meet or exceed the minimum requirements across all 4 pillars** of the capability assessment, demonstrating that strong performance in digital literacy, governance and infrastructure is possible with the right support and leadership in place.

Data demand-side perspectives

"We don't want to disempower suppliers. We want to strengthen the cooperatives."

International brand

The feasibility study mapped the **ever-growing list of objectives** that cocoa supply chain data needs to serve. This included international legislative and reporting requirements, data protection requirements, making assurance claims, monitoring in-country contracts, understanding product origin and traceability and for internal reporting and improvement.

Data typology

- **Union membership** (i.e. demographics)

- **Traceability** (i.e. origin)
- **GIS/polygon mapping** (i.e. farm boundaries for EUDR)
- **Human rights data** (i.e. child labour, access to services)

Data is **collected from unions by a range of stakeholders**, including Licensed Buying Companies (LBCs), audit and consulting firms, certification schemes and NGOs. **Data is then held and stored in systems of varying complexity and maturity**, within unions (eg Excel), certifying agencies (eg Fairtrade's Fair Insight or FairTrace), the Ghanaian regulator (Cocoa Management System), and the internal systems of data management within brands and exporters.

The discrepancies between the maturity of existing systems results in demand-side data users facing concerns around **fragmentation, interoperability and duplicative costs**.

Above all else, demand-side stakeholders expressed concerns about **data quality**. The legal and commercial need for high standard of data quality is a major driver in the creation of duplicative systems of collection and verification – and a critical issue to tackle to support the long-term uplift of cocoa farmers and the sector as a whole.

So what can be done?

All participants in this study recognised that while none of these challenges are new, the growing number and speed of evolution of new requirements are creating additional **administrative and financial burdens on producer associations**.

Demand-side stakeholders were united in their desire **for data harmonisation, increased data transparency and producer empowerment**. They were also aware of the long-term nature of this vision and of the many legal, technological and commercial barriers that will need to be navigated to achieve this vision.

Recommendations

1. Harmonise data requirements

- Build collaborative partnerships between data buyers, certification schemes and regulators to define standard data categories, formats and validation processes
- Actively work to reduce duplicative data collection through collaborative approaches and create stable conditions for unions to invest in long-term solutions

2. Collaborate to support tailored capacity building

- Collaborate to co-design and share the costs of union capability strategies
- Ensure capacity building efforts are union-specific, with data management, digital tools and staffing based on their actual and divergent needs

3. Foster peer-learning networks

- Fund and facilitate union-to-union learning and collaboration to support the uplift of the whole sector
- Encourage knowledge-sharing platforms that build collective capacity and resilience

4. Co-create a business model for data commercialisation

- Engage unions in designing and trialling the implementation of new business models for data collection and management in which unions are directly compensated for their efforts
- Build long-term strategies to reduce reliance on third-party data collectors towards producer organisations themselves

5. Adopt FAIR Data Principles¹

- Prioritise Findability, Accessibility, Interoperability, and Reusability of data across the supply chain and ensure that data shared by unions is returned to them in accessible, usable formats

What next?

There is clearly an opportunity to harness the overlap between market actors' need for increased data transparency and harmonisation and empowerment of producers to own their data. We see data ownership by cooperatives as having the potential to provide long-term benefits for all supply chain actors. However, this cannot be achieved in isolation and will require co-development by supply chain actors.

Fairtrade has started piloting with three unions initially, building their capacity while testing a business model for monetizing their data. We are looking to work with others on this pilot phase, as outlined below. Please contact lea.berdah@fairtrade.org.uk to register your interest.

	LBCs/traders	Brands and retailers	Civil society	Anyone interested
Role	Practically test a business model for Ghanaian cooperative data	Advocate for cooperative data in their supply chains	Amplifying learning from the pilot and ensuring data protection laws are upheld	Receive updates. Consider future partnership
Benefits	Understand data quality, validation and pricing	- Create shared vision - Reduce risk through improving data transparency	- Improve access to data and data quality - Strengthen learning for data systems	Keep up to date on progress of the pilot

¹ First published in Scientific, FAIR data principles are being increasingly adopted <https://www.nature.com/articles/sdata201618>



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