MiCacao – Digital Traceability Solution for the Cocoa Supply Chain

Implemented by the *Fund for the Promotion of Innovation in Agriculture (i4Ag)*
As part of the special initiative *Transformation of Agricultural and Food Systems*

The Challenge

To generate comparative advantages for the sustainable production of cocoa in Colombia and Peru

Small-scale farmers produce around 90% of the world's cocoa. If appropriate agricultural practices are not applied, cocoa is a crop that indirectly contributes to deforestation and, therefore, to climate change. Global demand for sustainably grown and deforestation-free cocoa is rising. Yet this demand has not generated significantly higher incomes for cocoa farmers who practice climate-friendly farming, in part because there is a lack of access to information as how to make their products visible and place them in that marketplace. Therefore, many producers remain unaware of the opportunities that digitalization offers to trace their products in a transparent and verifiable manner. Women cocoa producers experience an additional disadvantage as a result of their social status and condition, as they are also less likely to have access to digital tools.

When digital tools are applied in production processes and along the supply chain, they offer a comparative advantage when it comes to improving the placement of cocoa produced in a sustainable, climate-friendly and deforestation-free manner. This could generate numerous economic, social and ecological advantages.

Name of the project	The Open Cocoa Chain: Promoting interoperable traceability solutions for the cocoa sector
Name of the Global Fund	Fund for the Promotion of Innovation in Agriculture (i4Ag)
Commissioned by	German Federal Ministry for Economic Cooperation and Development (BMZ)
Project Region	Colombia, Peru
Implementing partners	Helvetas Swiss Intercooperation, Federación nacional de cacaoteros Colombia (FEDECACAO)
Duration	12/2022 – 04/2025

The Innovation

A digital, interoperable and freely accessible traceability system for the cocoa chain

The European Union recently approved a new regulation preventing the trade of products that generate forest loss; cocoa is among these products. This new standard requires companies to trace the origin of products to ensure they are free of deforestation. The use of digital tools by producers will allow data to be captured even without an internet connection. The data will be synchronised when there is connectivity. This allows for the gathering of information on the characteristics of the unit produced, of any existing voluntary certifications and other specific attributes of the product. The information collected will also allow for the establishment of traceability of the cocoa produced.

The project has two aims:

- To improve the market position of cocoa farmers who apply climate-friendly and deforestation-free agricultural practices.
- To establish the necessary infrastructure for the dissemination and implementation of an interoperable and freely accessible digital traceability solution, to be named *MiCacao*

The Main Objective

Validate a traceability tool to strengthen the market position of cocoa farmers who apply climate-friendly and deforestation-free agricultural practices

From left to right:

- *Cocoa Agroforestry System in Peru*
- *Cocoa producer in Colombia*
- *Digital tool, MiCacao*

2688 *male cocoa farmers and* **672** *female cocoa farmers apply the traceability tool*

1008 *male cocoa farmers and* **252** *female cocoa farmers improve the price of their product by 10% over market price*

The project contributes to the achievement of these Sustainable Development Goals (SDGs):

Methodological Approach and Innovation Partnership

Cocoa producers will use a scalable traceability solution based on the openly accessible, interoperable blockchain technology developed by the global partner Open Food Chain Foundation. This will enable them to gain greater visibility and thus a comparative advantage for their sustainably produced, climate-friendly and deforestation-free cocoa throughout the production and supply chain.

The methodology will take into special consideration the specific situation and condition of cocoa farmers, who produce 23% of cocoa-growing areas in Colombia and 12% in Peru. The traceability tool, *MiCacao,* will facilitate the necessary conditions to ensure that women producers have equal access to the services and benefits of the project.

To enable small-scale producers to make use of this innovative digital technology, local partners such as FEDECACAO (in Colombia) and Helvetas (in Peru) are implementing the project in cooperation with other partners such as the *École des entrepreneurs du Québec* in Colombia and the *Centro de Conservación, Investigación y Manejo de Areas Naturales* in Peru. Based on their specialisation, all partners will accompany the entire project, collaborating in the following stages: diagnosis, design and adjustment of the traceability tool, as well as during its implementation, integration and permanence.

Important Activities

- Training in the application of traceability solutions for 840 female cocoa farmers and 3360 male cocoa farmers.

- Creation of a first prototype of the digital solution based on blockchain technologies, in cooperation with implementing partners. 200 farmers in Colombia and Peru (100 in each country) will be involved in this pilot phase of the project.

- 6 informative events for the socialisation and dissemination of the digital traceability solution, aimed at key actors in the chain.

Permanence and Scaling Strategy

The design of the *MiCacao* solution aims at the sustainability (permanence) of impacts, based on the trust generated by transparency and free access to truthful and verifiable information throughout the production and supply chain.

In the medium term, the capacity building strategy, designed for all stakeholders, generates the acquisition of digital competencies necessary for this technological innovation to be scalable to other crops and sociocultural contexts. The exchange of experiences and knowledge with other projects implemented by GIZ, such as ProAmbiente, BioInvest and INCAS Global+, will support the horizontal scalability of the innovation in Colombia and Peru. In the long term, the integration (competencies) and institutionalization (capacity) of the acquired knowledge on digital traceability will be stimulated and incorporated by the various implementing partners.

Finally, the permanence and scalability of the traceability solution *MiCacao* will be driven by key players in the cocoa sector: international brands, local retailers, multi-stakeholder platforms and non-profit organizations. This creates good conditions for the continuation of activities in the implementing countries. Further progress will also be made in the development of the digital tool, for easy coupling with other freely available information technology platforms.