



Unlocking Innovation

Results and learnings from 15 value chain projects



Swiss Platform for
Sustainable Cocoa



Schweizerische Eidgenossenschaft
Confédération suisse
Confederazione Svizzera
Confederaziun svizra

Swiss Confederation

Federal Department of Economic Affairs,
Education and Research EAER
State Secretariat for Economic Affairs SECO

Imprint

Publisher

Swiss Platform for Sustainable Cocoa
Gutenbergstrasse 14
CH-3011 Bern

Phone +41 31 311 65 11
info@kakaoplattform.ch
www.kakaoplattform.ch

Photos

(cover image) HALBA; (3) Elucid; (5) CABOZ; (11) gebana; (13) Chocolat Stella Bernrain; (14) Barry Callebaut; (16/17) Elucid; (18) ICI; (19) Lindt & Sprüngli; (21) Adobe Stock; (23 + 24/25) Chocolat Stella Bernrain; (27 + 28/29) Läderach; (31 + 32/33) Swisscontact; (35 + 36/37) Helvetas; (39 + 40/41) Barry Callebaut; (43 + 44/45) ICI; (47 + 48/49) HALBA; (51 + 52/53) Lindt & Sprüngli; (55) Helvetas/Felana Rajaonarivelo; (56/57) Schöki; (59 + 60 + 61) gebana; (63 + 64 + 65) CABOZ; (67 + 68/69) Barry Callebaut; (71 + 72/73) Farmstrong; (75 + 76/77) Helvetas; (79 + 80/81) Elucid; (rear page) Helvetas.

Design concept and layout

Selina Mostosi | www.sm-art-polydesign.ch

Auditor

PwC Schweiz

CONTENT

1. EXECUTIVE SUMMARY	4
2. PROJECT OVERVIEW	5
2.1 Geographical overview	6
2.2 Facts & figures	8
2.3 Insights into three of our projects	10
3. LESSONS LEARNED	14
4. FINAL REFLECTIONS FROM SECO	16



1. EXECUTIVE SUMMARY

Why this report

From 2018 to 2022, SWISSCO members have engaged in public-private partnerships, co-financed by the State Secretariat for Economic Affairs (SECO) to pilot innovative approaches in the cocoa value chain. With a total investment of over CHF 24 million, 15 innovative value chain projects in eight countries have generated insights into approaches to tackle the various socio-economic and environmental sustainability challenges in the cocoa sector and beyond.

This report provides an overview of these projects, summarising achievements through data analysis and stakeholder consultations. It offers key facts and figures, recommendations, and insights from project partners for scaling efforts and policy development. The report showcases the transformative power of innovation in the Swiss cocoa value chain, inspiring continuous improvement and sustainability. Harnessing knowledge from these projects, we aim for a brighter, more ethical, and prosperous future for the Swiss cocoa value chain, contributing to a broader dialogue on sustainable value chains worldwide.

Result of the projects

SWISSCO members and partners reached a total of 86'472 farm households during this project cycle. The female-headed farm households comprised 21'539 (approximately 25 %) of the total households reached, underlining a significant demographic factor in this endeavour. Mapping efforts were extensive, encompassing 92'261 polygons and 95'272 GPS-marked farms. Capacity-building initiatives were notably successful, with a substantial 47'434 participants in income diversification training (39 % female participants) and 66'333 participants in climate-smart agriculture training (24 % female participants). Additionally, the promotion of sustainable farming practices like agroforestry demonstrated encouraging outcomes, with 23'835 hectares dedicated to new agroforestry systems, constituting 13 % of the total cocoa cultivation area.

The way forward

The key learnings of this project phase will shape the future activities of SWISSCO members, amongst others when taking on the scaling of promising innovative approaches. A prerequisite for the successful scaling of projects is land tenure security and resource availability of farmers. Tailored interventions aligned with local needs and engagement of beneficiaries in their design enhance local ownership and thus increase the effectiveness and long-term impact of capacity-building. Leveraging local structures like Village Savings and Loans Associations (VSLAs) and innovative financing mechanisms plays a vital role in scaling efforts. Collaborations with national governments, digitalization for efficient service extension, robust monitoring, and navigating governance challenges are crucial strategies to drive sustainability and address complex cocoa sector challenges.

SWISSCO members are encouraged to strengthen cross-sectoral coordination and collaboration, particularly when active in the same geographical areas, thus moving from siloed to holistic approaches for sustainability in the cocoa value chain and beyond.

Consequently, a new SECO co-financing facility from 2023 to 2026 will provide SWISSCO members with the possibility to apply these learnings, aiming to leverage the resources of all supply chain partners and other sectors to effectively contribute to the SWISSCO Roadmap 2030 goals.

2. PROJECT OVERVIEW

Following two calls for proposals in 2018 and 2019, the final portfolio comprised 15 pilot interventions with a total funding of CHF 26 million, including a SECO contribution of CHF 7.6 million for the period from 2018 to 2022. The projects were implemented in Ghana, Ivory Coast, Peru, Colombia, Costa Rica, Togo, Uganda, and Madagascar and reached close to 90,000 cocoa farm households. The overarching aim of this co-financing facility of SECO was to improve the living conditions of cocoa farmers and their families through innovative partnerships with the private sector.

The 15 value chain projects offered a comprehensive array of interventions. These included providing cash transfers aimed at reducing child labour, offering health insurance to enhance the resilience of farmers, introducing technical innovations to improve data management and enable traceability of cocoa from bean to bar, implementing income diversification measures, facilitating payments for environmental services, providing tailored support services to farmers to boost yield, and introducing dynamic agroforestry systems for sustainable farming practices.

The selected projects were aligned with the Platform's Monitoring, Evaluation and Learning (MEL) Framework and contributed to the United Nations Sustainable Development Goals (SDGs). At the time of the launch, SWISSCO brought together 43 stakeholders from the private sector, civil society, academia and the government. Around half of the membership, at the time of the launch of the calls for proposals in 2018, was directly involved in the planning and implementation of the projects.



15
Projects



8
Countries



CHF 7.6 million
SECO contribution

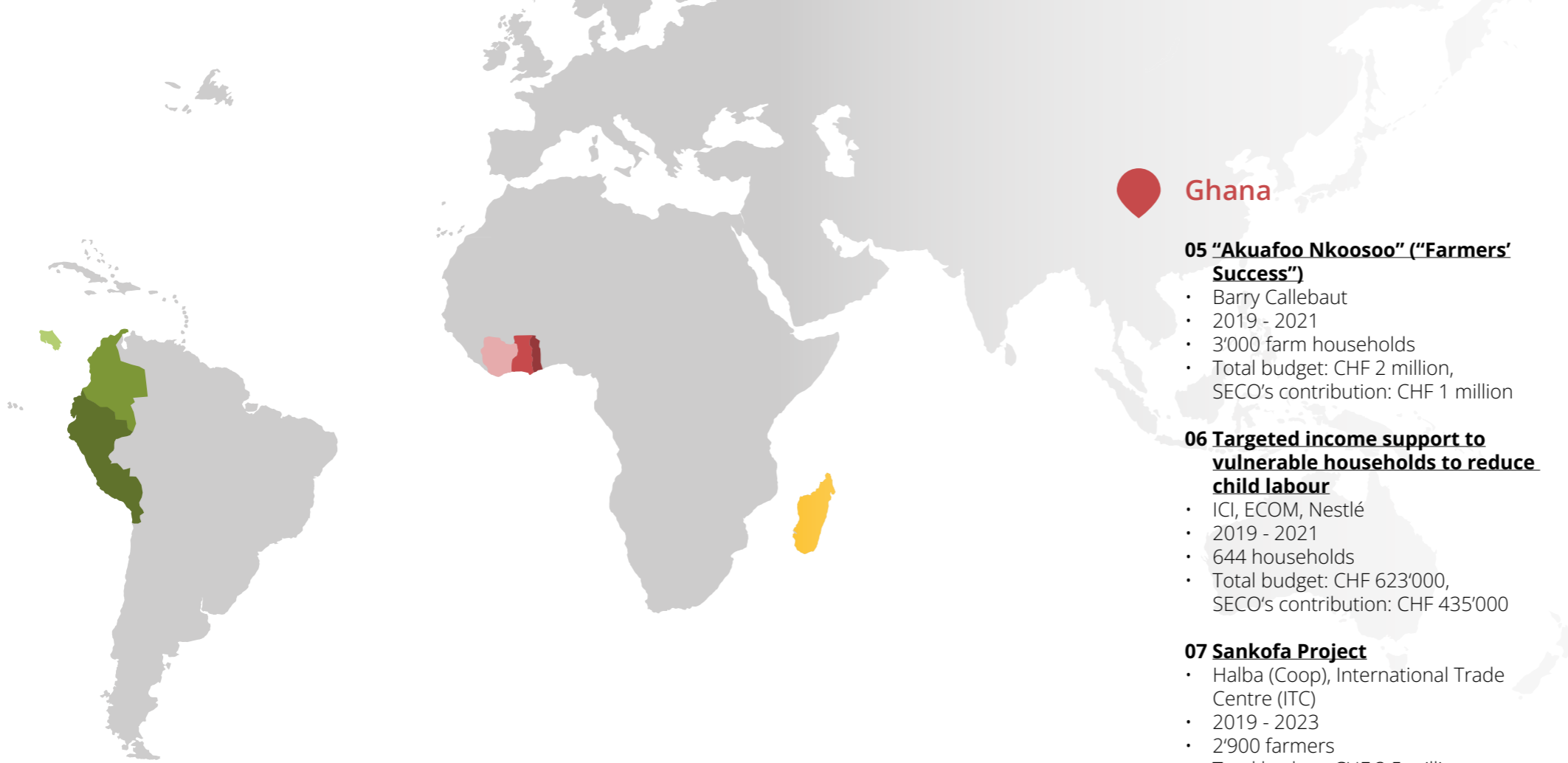


CHF 26 million
Total funding from project partners



21
Involved SWISSCO members





2.1 Geographical overview of projects from the 2018-2022 project cycle

Find out more about the projects by clicking on the title of the respective project.

Costa Rica

01 Improve livelihoods of indigenous, organic and Fairtrade cocoa farmers

- Chocolat Stella Bernrain, APPTA
- 2019 - 2022
- 100 farmers
- Total budget: CHF 180'000, SECO's contribution: CHF 90'000

02 Cocoa Tech Bridge

- Läderach (Switzerland) AG
- 2019 - 2022
- 300 farmers
- Total budget: CHF 190'000, SECO's contribution: CHF 95'000

Colombia

03 Colombian Specialty Cocoa for the Swiss Sustainable Market

- Swisscontact, Colcocoa, Pakka, EOS Entrepreneur Foundation, Solidaridad, Max Felchlin AG
- 2020 - 2022
- 2'524 households
- Total budget: CHF 1.48 million, SECO's contribution: CHF 920'000

Peru

04 Sustainable Cocoa Sourcing Landscapes in Peru

- Helvetas Swiss Intercooperation
- 2020 - 2022
- 2'500 farmers
- Total budget: CHF 2.6 million, SECO's contribution: CHF 1.2 million

Ghana

05 "Akuafuo Nkoosoo" ("Farmers' Success")

- Barry Callebaut
- 2019 - 2021
- 3'000 farm households
- Total budget: CHF 2 million, SECO's contribution: CHF 1 million

06 Targeted income support to vulnerable households to reduce child labour

- ICI, ECOM, Nestlé
- 2019 - 2021
- 644 households
- Total budget: CHF 623'000, SECO's contribution: CHF 435'000

07 Sankofa Project

- Halba (Coop), International Trade Centre (ITC)
- 2019 - 2023
- 2'900 farmers
- Total budget: CHF 3.5 million, SECO's contribution: CHF 1 million

08 A holistic approach to improving cocoa farmer livelihoods in Ghana

- Sustainable Management Services Ghana and Lindt & Sprüngli (International) AG
- 2019 - 2023
- 50'000 farmers
- Lindt & Sprüngli AG's contribution: CHF 8.3 million, SECO's contribution: CHF 1 million

09 Fair and sustainable chocolate through complete transparency

- Schöki
- 2020 - 2023
- Total budget: CHF 500'000, SECO's contribution: CHF 250'000

Togo

10 Innovative approaches to organic cocoa farming in Togo

- gebana
- 2020 - 2022
- 1'200 households
- Total budget: CHF 481'074, SECO's contribution: CHF 230'915

Côte d'Ivoire

11 Village Competence Centers

- CABOZ
- 2019 - 2022
- 1'461 farm households
- Total budget: CHF 1'075'000, SECO's contribution: CHF 500'000

12 Protecting natural resources and increasing farmers' incomes

- Barry Callebaut, Mondelez, Impactum
- 2020 - 2022
- 600 farmers
- Total budget: CHF 781'000, SECO's contribution: CHF 300'000

13 An integrated and strong landscape approach: The Green Nawa Initiative

- FarmStrong Foundation, Agroforce Commodities
- 2020 - 2022
- 14'000 households
- Total budget: CHF 764'000, SECO's contribution: CHF 300'000

Madagascar

14 Climate resilient cocoa landscape in Madagascar

- Helvetas Swiss Intercooperation
- 2020 - 2022
- 1'500 farmers
- Total budget: CHF 580'000, SECO's contribution: CHF 300'000

15 Salama Mateza

- mTomady, Max Felchlin AG
- 2021 - 2023
- 880 households
- CHF 33'400 contributed by SECO

2.2 Facts & figures

This chapter presents the most important numerical findings from the project cycle as a whole. The figures are aggregated data and are not representative of the cocoa sector as a whole, but relate exclusively to the projects. It is important to note that the training on capacity building, for instance, extended beyond households within the project partners' supply chains, often welcoming participation from other community members interested in joining. Additionally, it is essential to consider that not all activities were implemented uniformly across all projects.



Total number of farm households reached: 86'472, 25 % of which were headed by women



Average age of farm household head: 49 years, the youngest in Colombia (36 y/o) and oldest in Côte d'Ivoire (53 y/o)



Average household size: 5 members



Average area under cocoa cultivation: 2.5 hectares



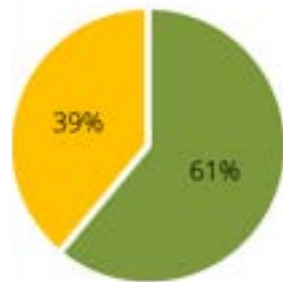
Average cocoa yield: 435 kg per hectare



Number of participants in capacity-building trainings

Number of participants in income diversification trainings

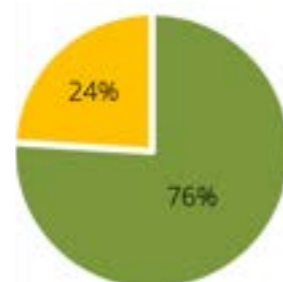
Total: 47'434



Men
Women

Number of participants in climate-smart agriculture trainings

Total: 66'333



Men
Women

The number of participants in climate-smart agricultural trainings exceeded those in income diversification trainings. In terms of gender distribution, 39% of the total participants in income diversification were women, while in climate-smart agriculture training, it was only 24%. Income diversification training encompassed amongst others capacity-building measures on the cultivation of non-cocoa crops and off-farm income-generating activities. Climate-smart agriculture training included activities on (dynamic) agroforestry and good agricultural practices, such as pesticide management and pruning. These numbers underscore a notable interest and engagement in climate-smart agricultural practices. However, income diversification remains a significant area of focus, particularly for female participants.

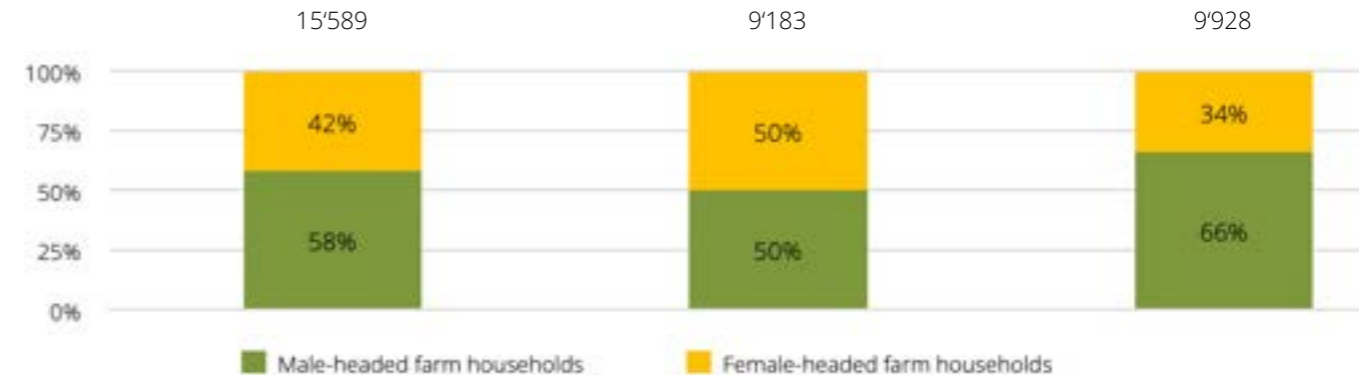


Access to finance

Overall, it is notable that the number of farm households reached with measures to improve their access to finance is low compared to the total number of households reached with the project activities. However, the share of female-headed households among those reached is remarkably high: 42 % of the farm households with saving accounts and half of the farmers with access to monetary loans are female-headed.



27'516 farm households utilized mobile payment systems in the last 12 months before the projects' conclusion



Number of farms mapped

A total of 92'261 farms were mapped using polygon shapes, while 95'272 farms were located with GPS coordinates. It is important to note that there is a nearly identical overlap between these two datasets.



95'272
Number of farms mapped with GPS



92'261
Number of farms mapped with polygon



Promotion of agroforestry and increased productivity



Total cocoa cultivation area: 185'338 hectares
 - Newly established agroforestry systems: 23'835 hectares (13 % of total cocoa area)
 - Replanted or rehabilitated cocoa area: 4'926 hectares (3 % of total cocoa area)



Overall cocoa seedlings distributed to farmers: 6'967'618



Overall plantain suckers planted: 287'870



Overall multi-purpose trees planted: 3'323'966

2.3 Insights into three of our projects

Improving cocoa supply chain transparency and farmer resilience

This project in Togo introduced a variety of innovations for a more transparent and efficient cocoa supply chain. The project, implemented by SWISSCO member gebana, improved farm management and farmers' income. In the following interview, Cathrine Cornella, Head of Impact Development at gebana, presents the 'gebana model' and the role that mobile payment systems played in the success of the project.

Cathrine Cornella, drawing from your experience with mobile payment systems, how significant is the role of these systems in bolstering the resilience of farmers?

Mobile payments play a crucial role in strengthening the resilience of farmers, especially in Africa where access to banking services is limited. gebana supports cocoa farmers by providing premiums during the lean season, addressing essential expenses like school fees and health costs. These premiums are conveniently and securely delivered to farmers through mobile payments, eliminating intermediaries and ensuring they receive their full amount. Notably, this approach mitigates risks associated with cash handling, enhancing security by reducing theft and fraud risks. However, particularly in rural areas in Togo and other cocoa-producing countries, cashless payment options are limited. gebana is pioneering the use of mobile payments for cocoa bean purchases, though challenges related to transfer and daily cash limits need to be addressed. We aspire for these systems to evolve, similar to other African regions, where mobile payments are already transforming various financial transactions.

Could you provide insights into the genesis and expansion of the 'gebana model'? What suggestions and best practices should be considered when adopting a similar revenue-sharing approach, and what pitfalls should be avoided during scaling?

The 'gebana model' was introduced in 2018, initially in Burkina Faso, and has now expanded to encompass operations in six countries. This innovative approach involves sharing 10% of our online sales revenue directly with the farmers who produce the goods. In 2022 alone, we successfully disbursed EUR 967,520 to a commendable total of 5,119 farmers. At present, 50% of our overall online sales revenue is integrated into this model.

The key to scalability lies in streamlining our payment processes through efficient methods such as bank transfers and mobile payments, effectively eliminating the need for cash transactions. Building strong and trustworthy relationships with our suppliers and producers has been pivotal, facilitated by the use of the Smartfarm application from Cropin. This app assists in registering farmer data and tracking the premium amounts they receive. Usually, the individual premium amount is calculated according to the volumes delivered by each farmer. Sometimes, each member of a cooperative receives the same amount. This needs to be decided together with the partner and farmers and depends on the circumstances. Importantly, our revenue-sharing model extends its benefits to all farmers associated with a supplier, promoting fairness in pricing and improving livelihoods.

„We see revenue sharing as a transparent means to ensure farmers receive a fair share of their product's price. It unites customers, farmers, and gebana in our commitment to equitable pricing.“



Cathrine Cornella,
Head of Impact
Development at gebana



We have been able to implement this model because we have a strong and direct customer base. Our customers know that 10% of what they pay will go back to the farmers. They shop not only for excellent quality but also for value. It is easier to implement such a model when you can directly communicate with your end consumers and are able to tell the story.

Nevertheless, we do acknowledge certain challenges, such as engaging wholesalers to contribute and ensuring the premiums remain meaningful in diverse circumstances. We see revenue sharing as a transparent means to ensure farmers receive a fair share of their product's price. It unites customers, farmers, and gebana in our commitment to equitable pricing.

How do you perceive the situation of women in Togo's cocoa sector? In what ways can targeted support be provided to enhance the empowerment and resilience of women within the sector?

In West Africa, notably in Togo, traditional agricultural practices have assigned land ownership and cocoa farming to men through generations. However, around 20% of cocoa farmers in Togo are women, managing an average plot size of half a hectare.

However, typically, women in Togo focus on subsistence farming while men engage in cash crop cultivation. To empower and include more women in cocoa farming, prioritising and subsidising work teams for women cocoa farmers, along with facilitating their participation in workshops and training sessions, is essential.

Location
Togo, Kpalimé and Badou area

Duration
2020 – 2022

Implemented by
gebana

Number of beneficiaries
2'106 farm households in four cooperatives

Budget
Total CHF 481'074
SECO's contribution:
CHF 230'915

Enhancing farming practices and farmer collaboration

In this project, neighbouring cocoa farmers in Costa Rica have learned how to collaborate together in domains such as the production of bio-fertilizers and the reproduction of disease-tolerant, productive cocoa varieties. The aim of this project, implemented by Chocolat Stella Bernrain and the farmers' association APPTA was to increase collaboration between farmers and raise the productivity of the cocoa harvest. In the following interview, Roberto Mack, Procurement Consultant at Chocolat Bernrain AG, talks about the achievements and challenges of the project.

Roberto Mack, what were the accomplishments of the project, and which unexpected outcome has particularly excited you?

The project significantly boosted the grafting skills of farmers across ten communities in Talamanca, Costa Rica, resulting in more than 28'000 successfully grafted elite CATIE varieties on farms. Further, six community-based units for producing fermented bio-fertilizers were established, enhancing farmers' ability to make and utilize fertilizers effectively. Despite the challenges of high prices for fuel, molasses and other inputs, the project contributed to improving participants' farm management, including fostering diversification strategies. Even during the harsh COVID-19 times, the project managed to be the bright spot of the association, bringing people together to improve their production systems.

One year after the finalisation of the project, what is your impression of the longer-term effects of the project? Are farmers still using the fermented biofertilizers and the improved varieties? Have more farmers adapted the improved farming practices?

After one year, farmers continue to apply biofertilizers, and productivity is going up for cacao and bananas. However, inflation and financial constraints within APPTA have posed challenges in keeping up the positive momentum created by the project and sustaining collaboration among farmers and neighbouring communities. This has somewhat impeded the overarching project goal of widespread dissemination of grafting and fermented fertilizer knowledge. Nevertheless, farmers have experienced a tangible improvement in productivity. Notably, regular usage of liquid bio-fertilizers has resulted in a 33% increase in banana bunch weights, underscoring the positive impact of the initiative.

The success of the project depended heavily on close and good cooperation with producer cooperatives. What insights can be gleaned from this experience? Could you delve into the benefits of working with producer cooperatives and shed light on the emerging challenges?

Above all, the success of the project was a result of having an excellent and very dedicated team of field extensionists and a truly exemplary field coordinator. The farmer-to-farmer training approach employed initially, based on small groups, played a pivotal role in the project's success. It allowed active participation and effective hands-on learning and communal support. However, the advent of Covid-19 necessitated a shift to one-to-one training, disrupting our traditional approach. These combined circumstances inevitably slowed down the project's pace, and the project period expanded from a two-year to a three-year framework.

„The farmer-to-farmer approach employed at the start of the project, rotating from farm to farm played a pivotal role in the project's success. It allowed active participation and effective hands-on learning.“



Roberto Mack,
Procurement Consultant at
Chocolat Bernrain AG from
Chocolat Stella Bernrain

What is your perspective on the current status of women in the Costa Rican cocoa sector? In what ways could targeted support be extended to enhance their empowerment and resilience within this sector?

In the Bribri culture of Talamanca, women play vital roles as family and community leaders. Within APPTA women have always been prominent, but there has been a challenge in enabling these women to take up leadership positions, given their lack of formal administrative skills and considering their family responsibilities. It is essential to improve economic conditions and provide incentives to train, encourage and compensate women for their valuable organizational contributions. For example, women often lack the financial means needed to be able to join the Board of Directors of the association.

Is there a possibility to expand the project's initiatives to other countries? If such scalability exists, what recommendations would you offer to stakeholders who are considering the implementation of similar projects in those regions?

Absolutely, projects that are designed to offer farmer-to-farmer training and increase productivity using low-cost technologies are paths to long-term success. One of my key suggestions is to train motivated young farmers in each community to empower them to become lead-farmers and extensionists. It is also important to enable both producers and coordinators to track the results of interventions.

Furthermore, it is advisable to consider longer project durations, preferably spanning at least 5 years, especially for perennial cropping systems. This allows for sustained impact and a more comprehensive transformation within the agricultural landscape.

Location

Costa Rica, Upper Talamanca

Duration

2019 – 2022

Number of beneficiaries

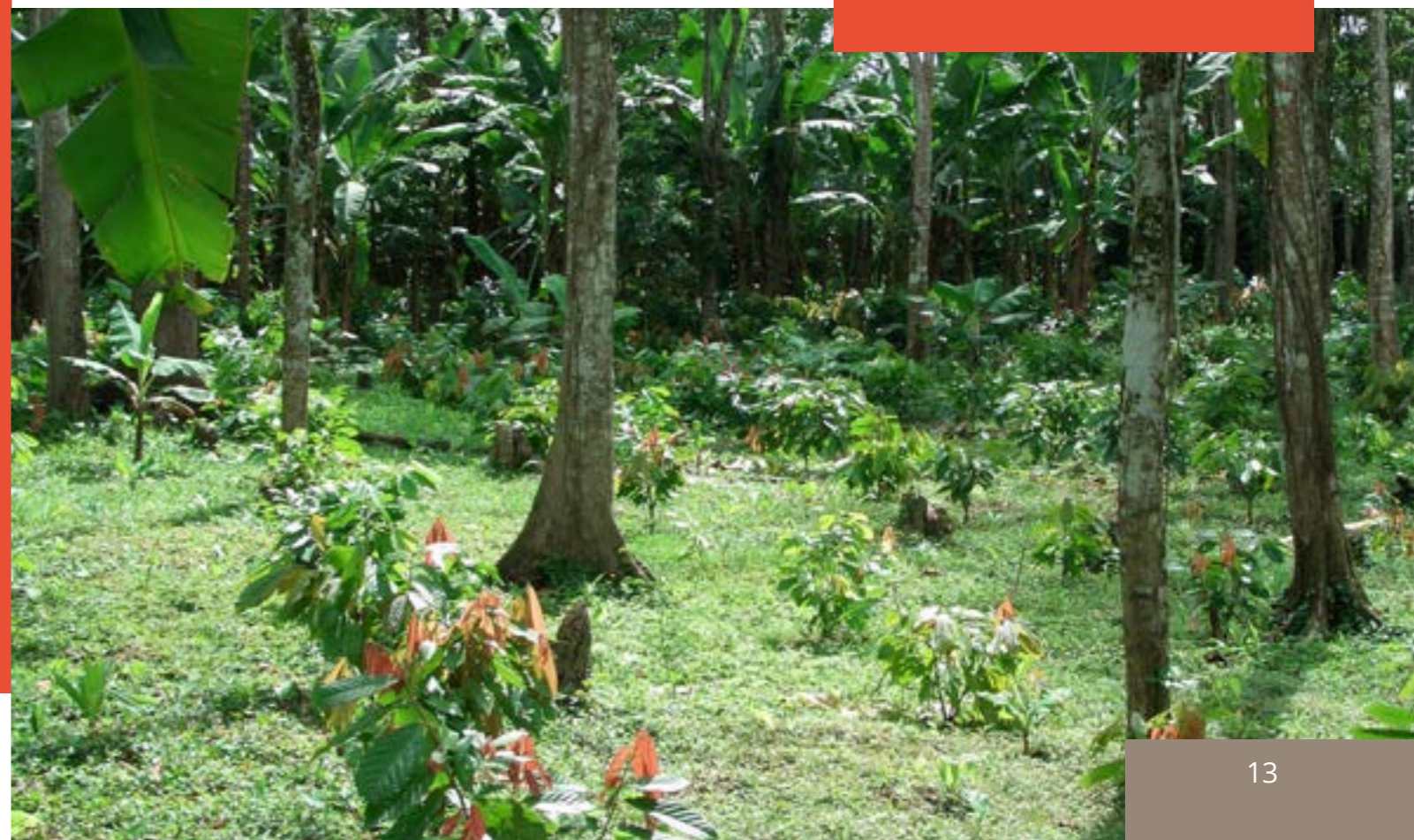
About 100 organic farmers in ten isolated communities

Project partners

Chocolat Stella Bernrain (Switzerland)
APPTA (Asociación de Pequeños Productores de Talamanca)

Budget

Total CHF 180'000
SECO's contribution:
CHF 90'000



Lessons Learned from Payments for Ecosystem Services

The aim of the project was to promote the sustainable use and protection of natural resources through the targeted Payment for Ecosystem Services (PES). The piloting of the PES approach aimed at increasing the diversification of income sources for cocoa farmers and improving the carbon footprint within the companies' supply chains. In the following interview, Tilmann Silber, Global Lead Thriving Nature talks about the potential of PES and the lessons learned from this project in Côte d'Ivoire.

Location

Côte d'Ivoire, San Pedro region

Duration

2020 – 2022

Number of beneficiaries

600 farmers

Project partners

Barry Callebaut
Mondelēz, Impactum

Budget

Total CHF 781'000
SECO's contribution:
CHF 300'000

Tilmann Silber, how can PES contribute to transforming the cocoa sector to a more sustainable future?

In the past, efforts were focused on distributing shade tree seedlings to farmers. However, without adequate support, these seedlings were at risk of not being properly planted and had a high risk of mortality. Shade trees offer significant benefits to farmers, including enhanced resilience in cocoa production amidst climate change, soil depletion, and pest issues. They also provide additional income, for instance through fruit trees. Nevertheless, these benefits manifest only after several years, once the trees have matured. This is where Payment for Ecosystem Services (PES) steps in, playing a pivotal role in financially incentivizing farmers to nurture the seedlings during their initial years. This approach, therefore, can significantly improve tree survival rates and, thereafter lead to a higher rate of carbon removal from the atmosphere.



As one of the key recommendations to other stakeholders implementing similar projects, you highlight the need to keep exploring the most efficient PES schemes. It's been a year since the project ended – has Barry Callebaut been able to make any further conclusions regarding the identification of the most efficient PES schemes?

Since concluding the SWISSCO project, Barry Callebaut has substantially expanded the implementation of PES in agroforestry through various partnerships. One key learning has been the necessity to keep the PES model simple. We have implemented a fixed fee per surviving tree per year. This fixed fee takes into account the labour and effort farmers invest in planting and tree stewardship during the initial years. Additionally, it is essential for the PES to be competitive and comparable to other carbon-related schemes, ensuring farmers receive fair cash payments for their contributions.

How do you ensure the engagement and the development of a sense of ownership of the farmers?

Farmer ownership is of high importance. It means striking the right balance between supporting the farmer and requesting their own engagement. As an example, farmers are requested to plant the shade trees themselves in order to ensure their own investment. Prior to planting we hold sensitisation workshops with farmers, to ensure they understand the program, what is offered to them, but also what is expected. When it comes to the selection of tree species, we regularly collaborate with farmers to ensure the tree selection matches their needs.

Land tenure security was highlighted as one of the main inhibitors for farmers and their willingness to set up agroforestry systems. Yet you acknowledge that finding solutions for this remains challenging. How will you approach this in the future?

Having formal rights to the land not only increases farmers' legal tenure security, but can also resolve land disputes. Through the Cocoa Horizons Foundation, a key member of the Côte d'Ivoire Land Partnership (CLAP), we are actively working to enhance land tenure security. CLAP is dedicated to supporting land and tree rights. In West Africa, obtaining land certificates can be a costly and time-consuming process, unlike in some other countries. Together with our partners, we are currently exploring ways to further accelerate this program.

„Payments for Ecosystem Services (PES) play a pivotal role in financially incentivizing farmers to nurture the seedlings during their initial years. This approach, therefore, can significantly improve tree survival rates and, thereafter lead to a higher rate of carbon removal from the atmosphere.“



Tilmann Silber,
Global Lead Thriving Nature

3. LESSONS LEARNED

This chapter presents insights from 15 value chain projects conducted from 2018 to 2022, offering valuable cross-project and cross-country learnings. With the projects' innovative nature, these findings serve as guidance for potential scalability. The integration of a gender perspective extends across all topics and reflects SWISSCO's commitment to promoting inclusive approaches and addressing the needs and challenges of women along the entire cocoa value chain.



Farmer Income – Towards a Living Income

Enhancing Productivity with Prices: Productivity and price are interlinked. Without higher and more stable prices, the impact of yield improvements remains limited. Between 2018 and 2022, farm gate prices were often very low, and market incentives (premiums) were inadequate to compensate for the low farm gate price. This underlines the role of pricing as a critical element in achieving a living income.

Diversification for Resilience and Income Growth: Diversification, both within the cocoa sector (through farm rejuvenation and efficient farming practices) and beyond (vegetable farming, bakeries, grass cutters, handicrafts), is crucial for enhancing the income, resilience, and overall livelihoods of cocoa farmers. However, the fast expansion of income diversification measures does not always guarantee reliable income streams due to various factors such as the lack of local markets or capacities. Moreover, female farmers face additional challenges, including limited access to resources, gender-based constraints, and societal norms that may hinder their participation in income diversification activities, emphasizing the need for targeted support and empowerment initiatives.

A Holistic Support Set-up: To address challenges such as farmers' limited resources and knowledge gaps, it is vital to empower farmers through a holistic support set-up, involving tailor-made training (including individual coaching), access to finance and sustainable farm inputs, and efficient infrastructure (like efficient cookstoves and centralized service centres). Optimizing interventions through a combination of approaches (e.g., coaching, farm development plans and VSLAs) and assessing outcomes based on intervention intensity can significantly enhance yield, income sources, and resilience within the cocoa farming communities. Long-term engagement with farmers and stakeholders and continuous capacity building and gradual approaches are necessary for sustainable success.



Agroforestry and Climate-smart agriculture

Enhanced Adoption through Tailored Engagement: Adoption of improved farming practices is influenced by various factors, including farmer demographics, equipment availability, and willingness to change traditional practices. Engaging farmers in a dialogue about proposed practices, understanding their preferences and concerns, and prototyping solutions on a smaller scale can increase adoption rates and ensure economic viability and technical feasibility before scaling up. Tailored recommendations and coaching, especially for female-led households, are imperative in this dialogue to address unique challenges they may encounter.

Financing the Transition Towards Regenerative Production Systems: New sources and models of financing are needed to allow for supporting the transition towards regenerative production models. This should include supply chain partnerships as well as cross-sectoral collaborations. Such climate & nature financing models can include amongst others Science-Based Targets carbon premiums, carbon credit mechanisms or Payments for Ecosystem Services. Find more information in the [SWISSCO technical paper on Climate & Nature Finance](#) and the [Guidance Document on Approaches, Financing Needs and Opportunities for climate-smart agriculture and agroforestry in cocoa](#).

Addressing Regulatory and Legal Challenges for Sustainable Impact: Overcoming regulatory complexities related to land tenure security, legislation concerning the sale of ecosystem services, and deficient implementation of policies at the regional level is crucial to facilitate the successful implementation of agroforestry systems and sustainable practices. Clarity and regulation regarding ownership and utilization of ecosystem services, forest plantations, and timber production are essential for fostering a sustainable landscape and encouraging reforestation efforts.





Amplifying Transparency through Traceability Solutions

Bridging the Technological Gap - Skills and Sustainability: In the journey to narrow the technological divide in rural communities, providing local partners with technical and management skills is crucial for success. Overcoming challenges in access to technology, especially in the first mile, requires initial incentives for capacity building. The transfer of knowledge and expertise fosters ownership, paving the way for long-term success. Key to this approach is enabling a dynamic technical team, including the youth, to catalyse innovation and bridge generational disparities.

Fostering Traceability Through Incentives for Farmers: To address the technical, educational and situational constraints of farmer data collection, it proved helpful to identify aspects of how traceability can benefit the producers. Concrete incentives such as access to affordable health services or mobile money payment systems proved to be key drivers of enhanced traceability.

Empowering Traceability for Accountability: Implementing cutting-edge traceability tools dependent on data requires prioritizing concerns about data ownership and farmer privacy. Especially when sensitive information, like health data, is linked to farmers' IDs, a robust data management approach is imperative. This ensures confidence, protects farmers' rights and interests, and enhances transparency throughout the traceability process.



Addressing Child Labour

Cash Transfers can help address child labour in cocoa: Unconditional cash transfers can be an effective means of reducing child labour, increasing household resilience to adverse events, and improving children's material well-being. They should be considered as elements within broader strategies to address child labour in the cocoa sector, both as part of government-led social protection and as part of supply-chain based programmes.

Child Labour Prediction Models: Predicting the risk of child labour through data-based models can help target interventions more efficiently. They can guide the prioritization of high-risk households for child labour monitoring and inform the distribution of preventive support. However, such models are reliable only if they are fed with accurate and up-to-date data on targeted farm households. Many producer organisations and sourcing companies will need additional capacity-strengthening support for collection and management of farm household data to upscale risk-based approaches more broadly.



Financial Inclusion

Mobile Payment Adoption Challenges: Implementing mobile payments for purchases and premiums in rural areas across all project regions in Africa faced hurdles including lack of trust, limited availability of mobile money agents, technical knowledge limitations, and high transaction costs. Understanding and addressing these barriers is essential to encourage the adoption of these systems by farmers.

Leveraging Village Savings and Loans Associations (VSLAs): Challenges in accessing bank accounts or mobile financing, due to a lack of recognized identification documents, underscore the need for alternative financial systems like VSLAs. These systems are crucial for enhancing financial inclusion, particularly for women, and supporting income-generating projects in remote areas. The sense of community within VSLAs facilitates successful savings schemes, empowering members with capital for household expenses and contributing to local economic development. An evident trend is the empowerment of female-headed households through VSLAs.

Unlocking Economic Impact: While VSLAs are valuable, they are limited to small investments. Exploring alternative financial models will foster sustainable development. To truly transform communities, a strategic shift is needed. A key strategy involves placing women in leading roles within primary businesses, not just confined to sideline ventures, contributing to a comprehensive transformation of communities.



4. FINAL REFLECTIONS FROM SECO

Concrete results that change individuals' lives

This learning report shows that through projects co-financed by SECO over the past five years with different partners from the private sector, considerable and tangible results have been achieved. The projects have reached almost 90'000 farming households, which is quite an impressive number. What a project intervention can mean for each of these households is expressed in clear words by a farmer in Ghana:

"I have always been a farmer, but I also worked in construction because I never believed I could get enough out of farming to make ends meet. Now my perception changed. Not only do I get good farm produce, I also earn more income. Now I do only farming. This project has diversified and increased my income, changing my standard of living - I now have a television, a gas stove and a bicycle, and roofed my uncompleted building."

Besides giving an economic perspective for these 90'000 farmers and their families, the projects have also sparked innovations in areas such as traceability, health insurance and sustainable production practices methods in different geographies, from Colombia to Ghana, passing by Côte d'Ivoire and Madagascar. What is worth mentioning too: SECO has incentivized the other stakeholders to do more and our co-financing has mobilised almost three times as much partner funding. This is a strong sign of the interest and willingness of our partners in general, and the private sector in particular, to make considerable investments. This holds true not only for large companies with a strong track record in international project work, but also for many SMEs.

Tackling challenges together

Of course, such results motivate us to do more. In order to bring activities to greater scale and reach out to more farmers during the new phase of our partnership with SWISSCO, launched back in January 2023, we decided to put landscape approaches at the centre. In a nutshell, landscape approaches address interconnected development challenges, such as poverty or deforestation, in a given geographically area (landscape) working across commodities and involving private as well as public sector actors. What is key in such approaches is the coordination of the different reform agendas and active engagement of all relevant stakeholders, from local authorities, international and local private sector, to civil society and research institutions.

Landscape approaches are therefore fully aligned with SWISSCO's Roadmap slogan "Tackling challenges together". Within a landscape, all involved actors should agree on a common goal, take responsibility and measure progress against defined targets. We hope that this promising approach will be able to bear fruits, and that in the years to come we will be able to report on success and the results achieved, together.



Monica Rubiolo

State Secretariat for Economic Affairs
SECO



Improve livelihoods of indigenous organic and Fairtrade farmers

In this three-year project, farmers learned how to produce bio-fertilisers and propagate disease-tolerant cocoa varieties. The aim was to increase productivity of the cocoa harvest for the coming decades and thereby improve the livelihoods of these indigenous organic and Fairtrade farmers.

Location

Costa Rica

Duration

2019-2022

Beneficiaries

100 organic farmers

Implemented by

Chocolat Stella Bernrain

Budget

Total: CHF 180'000,
SECO's contribution:
CHF 90'000

Project partners

APPTA (Asociación de Pequeños
Productores de Talamanca)

What the project was about

The very humid climate in upper Talamanca, Costa Rica, favors the growth and propagation of fungal diseases such as Monilia and Phytophthora. Especially in old cocoa trees, a large part of the pods go bad before they are ripe. As a result, farmers often abandon their trees because it is not worthwhile to maintain them. In addition, many years of harvesting organic cacao and banana depending only on natural nutrient cycling has reduced soil fertility and therefore has contributed to declining productivity in recent years.

What was done

The project aimed to foster farmers' skills in cocoa tree management in order to increase the harvest of organic cocoa and consequently, the farmers' income. To attain this goal, several key initiatives were undertaken during the project.

Firstly, the project facilitated distribution of productive and disease-tolerant cocoa varieties (CATIE) among the farmers. These varieties were supplied by the local nursery which had been established during an earlier phase of the project. Secondly, the project provided hands-on training to the farmers in vegetative propagation of the newly received cocoa varieties or their existing plants to rejuvenate and increase the total number of cocoa plants on their parcels.

Lastly, village-level training sessions were conducted that focused on the production, maintenance and application of organic low-cost fermented bio-fertiliser.

What didn't work or had unintended consequences

Originally, the project was planned to last only two years and was meant to be carried out not only in Costa Rica but also Panama. However, implementation in Panama was not possible since the local cooperative did not provide enough capacities to carry out the trainings. In addition, the initial cooperation with Cooperativa Sin Fronteras (CSF) from Germany was discontinued since the organisation closed down its office in San José.

In Costa Rica, due to extensive COVID-19 restrictions, the group trainings had to be largely replaced by individual farm visits. This made it necessary to extend the project by one year, which was financed by the omitted expenses in Panama. In fact, this working one-to-one made the project in Costa Rica more effective and the extension allowed to see its impacts in a longer term.



What the project achieved

Over the course of the three years of the project, more than 30'000 cocoa plants were grafted and established in existing cacao parcels to replace old, unproductive or dead trees, or to set up new parcels nearby.

Furthermore, nearly 100 farmers have learned and adopted the practice of grafting cocoa plants and are aware of the changes in pruning methods compared to non-grafted trees.

Moreover, in six out of the ten communities, small installations for producing fermented bio-fertilizer were established and the fertilizer is widely used for both cocoa and other crops.

At the end of the project, the farmers already observed improvements in terms of tree health and productivity, which they attributed to the bio-fertilizer, the new varieties, and their newly acquired management skills. Also, as farmers realised an improvement of their cocoa is possible, many of them gained new motivation to work in their cocoa fields.

“ Five or six years ago, we planted a cocoa tree on the off chance. Either we were lucky and the plant gave a lot of fruit. Or we were unlucky, and there was no yield. With the new cocoa varieties and cultivation techniques, we no longer have this problem. Every seedling planted that grows big also gives a lot of fruit.”



Don Hidalgo Zuñigo,
Farmer from San Vicente, Costa Rica



Interview with Monica Müller from Chocolat Stella Bernrain

Monica Müller, in what ways were the project's approaches new and innovative?

The techniques in which the farmers were trained are generally not new. Nevertheless, our approach was innovative as the propagation of cocoa plants and the production of the fertilizer took place at village and farm level rather than at centralised nurseries.

What has Chocolat Stella Bernrain learned through the project?

We learned a lot about propagation and grafting techniques, for example that cleft grafting is much more successful compared to patch grafting. For future projects, we can draw on that knowledge. We also realised that we didn't invest sufficiently in infrastructure like shade cloths and water collection at the farm-based nurseries. This is another important lesson learned to make future projects more efficient.

What do you recommend to other stakeholders implementing similar projects?

We suggest to involve the local partner organisations from the very beginning in the selection of the project participants – the communities and farmers –, since it is important that they have a say and enough time to select the participants. Also, we suggest to choose the staff or field team carefully, as a successful project implementation depends largely on them.

“ We suggest to involve the local partner organisations from the very beginning. ”



Monica Müller
CEO, Chocolat Stella Bernrain

What are the next steps?

Our collaboration with the association APPTA continues, meaning that we regularly buy their cocoa. For now the project is left to its momentum. In one to two year we will assess how the project has developed. Are farmers still using the fermented biofertilizers and the improved varieties? Have more farmer adapted the new improved practices? Based on this evaluation, we will decide how to move forward to support long-term sustainability of the project activities.

How is it ensured that the project has not only short-term but long-term effects?

This is ensured as the project focused mainly on knowledge dissemination and on practices that allow farmers to improve their production with limited resources. Farmers know how to propagate cocoa plants and can draw on that knowledge for many years to come. With the bio-fertilizers, it is similar: The farmers can produce it by using locally available, low-cost ingredients, except for some of the minerals that need to be purchased. We hope APPTA will support the farmers with occasional technical and logistical support if necessary, in addition to buying their cocoa and other crops as usual.



Cocoa Tech Bridge

The project developed a cloud-based mobile application to track the exact origin of cocoa from Costa Rica and manage financial premiums flows from Läderach (Schweiz) AG to small-scale farmers as part of its „Family Life“ sustainability programme.

Location

Costa Rica

Duration

2019-2021

Beneficiaries

300 farmers

Implemented by

Läderach Switzerland AG

Budget

Total: CHF 190'000,
SECO's contribution:
CHF 95'000

Project partners

FarmStrong Foundation, Nahua
Cacao & Chocolate



What the project was about

Digitalisation helps improve traceability among the complex cocoa supply chain, which is a key requisite to increase sustainability in the sector. For example, if processed cocoa can be tracked to its exact origin, this allows buyers to appropriately compensate farmers on an individual level and to reward them for their quality and sustainability efforts. The project partners therefore developed a cloud-based mobile application called „Cocoa Tech Bridge“ to track the path of cocoa from farmers in Costa Rica to processing in Switzerland. In future, all sourcing and sustainability activities of Läderach's „Family Life“ programme are meant to be managed via this or an equivalent Digital Information Management System.

What was done

To set up and use the „Cocoa Tech Bridge“ application, the project included the following activities:

First, development of a mobile app that is multilingual and works off-grid until the user reaches network from where the information is uploaded to a cloud.

Second, baseline questionnaire to gather information about the farmers such as name, gender, age, level of education, completed farming trainings as well as farm mapping (spanning a polygon to clearly identify farm boundaries).

Third, distribution of farmer ID cards that are scanned with each sell to Nahua, the local sourcing partner of Läderach.

Fourth, tracing the journey of cocoa from Costa Rica to Switzerland by registering all stages in the „Cocoa Tech Bridge“ application while preserving the identity of all batches in the containers.

What didn't work or had unintended consequences

In addition to the activities described above, the project should have encompassed trainings in income diversification, crop diversification, and climate-smart agriculture. Also, the information from the baseline questionnaire should have been compared to a second and third questionnaire to conclude about the livelihood improvements or other progress. However, this was impossible due to the impact of the Covid-19 pandemic on the project activities on the ground. For the same reason, and further aggravated by several staff changes, it was also not yet possible to carry out the initially planned individual premium payments to farmers by Läderach for their quality and sustainability efforts. An issue that came up in this context was the question of whether the payments should rather be channelled via Nahua instead of Läderach, to limit the influence of Läderach on Nahua's business activities.

What the project achieved

Over the three years of the project, information of 291 farmers was collected using the Cocoa Tech Bridge application. By the third year of the project, Läderach procured three containers (containing 37.5 metric tons of cocoa in total) with this new system. It proved that the traceability tool works well and is useful. The application successfully provides and saves all relevant data, e.g. data for drying, sorting or cleaning which can be managed in batches to allow a precise stock control and scheduling for the partner in the origin. Each bag is tagged with the relevant QR code to connect both the farmer and the product in the onward supply chain and this data is available at any time.

“ When my husband died, I was suddenly in charge of the cocoa plantation but lacked the knowledge to maintain its productivity. Nahua and Läderach connected me with buyers from Canada and Portugal, who will buy my cocoa and raise funds for technical assistance. This is only possible thanks to the new traceability tool that separates the identity of my cocoa from that of other farmers. ”



Ramona Rosa Agüero
Cocoa farmer in Guatuso, Costa Rica



Interview with CEO Johannes Läderach about the project

Johannes Läderach, in what ways were the project's approaches new and innovative?

It is very important for us to know the living conditions of the cocoa farmers, their environmental standards and the quality of their cocoa. But control is only possible if complete traceability is guaranteed. Thanks to our Cocoa Tech Bridge application, this can now be optimally measured digitally and in real time.

What has Läderach learned through the project?

We realised that collecting, correcting and uploading the baseline information about the farmers takes significant effort and time. This is due to the high amount of information required, drawn from both observations, interviews and farm mapping. Once this was done, the workload in the "business-as-usual" scenario was drastically lower. Also, the information collection during the sells was quick and does not present a barrier for the use of the tool.

However, it nevertheless requires a certain degree of training for those who collect the information, do the transactions or access the aggregated information. In future projects, we will consider this better. Also, we need to be aware that an application covering a vertical supply chain can be challenging for other companies or partners. Different companies use different tools tailored to their supply chain management, capacity and needs. This raises the question of the practicality of "one-size-fits-all" solutions. If Läderach's partners use different systems in the broader global context, we should also focus on how to make these tools integrable into the "Cocoa Tech Bridge".

What do you recommend to other stakeholders implementing similar projects?

When implementing data-based tools to increase traceability, the question about ownership of the data and privacy of the farmer information should be raised. The use of their information should be handled sensible and in accordance with the owner. It should also be considered that farmers might be reluctant in using the tool, especially in the beginning, and that an effort is needed to convince them of the advantages. Regarding the work with several project partners, we suggest to clearly define responsibilities and cost-sharing ratios. For example, our partner Nahua now has access to the "Cocoa Tech Bridge" and can share information with other customers, while Läderach (Schweiz) AG is providing the tool at no cost. Such issues should be part of the discussion on how funding is acquired and used.

What are the next steps?

The goal is to continue using and optimising the "Cocoa Tech Bridge". Currently we are in exchange with the developers to plan the next steps. During the pilot phase, a significant amount of data was collected and data processing and evaluation was time consuming. The aim is to now keep the daily effort small and to start providing transparency to our customers, here we have to pay attention to all data protection relevant information.

In the future, it may be possible to use a technology like the "Cocoa Tech Bridge" in the supply chains of other raw materials as well.



Johannes Läderach
CEO, Läderach Chocolatier Suisse

How is it ensured that the project has not only short-term, but long-term effects?

We have repeatedly seen how challenges at the origin can be identified through data analysis, showing us how important digitalization is in this sector. We are also able to digitally record the impact of projects such as reforestation and have measurement criteria to do so. Honest transparency is also important to our customers and it will be easier for us to create this transparency in the future with digital interfaces such as the Cocoa Tech Bridge developed in this project.

“ The question about ownership of the data and privacy of the farmer information should be raised. ”



Colombian Specialty Cocoa for the Swiss Sustainable Market (Cacao+Sostenible)

The project adopted new sustainable business models for the supply of Colombian specialty cocoa to the Swiss market. In particular, the project promoted transparent long-term business linkages and helped farmers to improve farm profitability and quality.

Location Colombia	Duration 2020-2022	Beneficiaries 2'500 farm households
Implemented by Swisscontact	Budget Total: CHF 1.48 million, SECO's contribution: CHF 920'000	Project partners Colcocoa, Pakka

What the project was about

In 2016, the Government of Colombia signed the Peace Agreement with the FARC rebel group and cocoa became a key factor as part of the post-conflict framework, as it is considered an ally in the substitution of illicit crops. However, most projects in the cocoa sector lacked market orientation and the support of small cocoa producers achieved limited results in terms of sustainability and scale. This project helped leverage private sector investments to generate innovations and develop new processes, products, and technologies. The goal was to improve the living income of cocoa farmers and their families and to achieve a transparent, traceable, and climate-friendly cocoa supply chain.

What was done

Cacao+Sostenible consolidated and leveraged viable and innovative business models that provide exportable supply according to the requirements of the sustainable Swiss chocolate industry within a framework of better conditions for small producers and their families. This was achieved through a multi-faceted approach. First, it involved directly linking small and environmentally responsible producers in Colombia with sustainable buyers in Switzerland by utilising certification schemes and traceability platforms. Additionally, Cacao+Sostenible offered efficient and cost-effective services to small producers, encompassing management support, technical assistance, and capacity-building in climate-smart agriculture and eco-intensification practices. Furthermore, Cacao+Sostenible worked on promoting access to inclusive financial products and solutions tailored to the unique characteristics and requirements of small cocoa producers. Lastly, a crucial aspect of Cacao+Sostenible's efforts involved creating a robust knowledge management system focused on sustainable cocoa production.

What didn't work or had unintended consequences

Due to the restrictions posed by the Covid-19-pandemic and the public unrest in Colombia, workshops and trainings have been conducted virtually and more digital tools were developed. At the commercial level, the restrictions have led to shortages in the supply and transportation of cocoa, which meant that new capacities had to be built up within the producer organisations. Rising input prices have increased production costs and atypical rainfall due to the La Niña weather phenomenon has decreased productivity. This has led to a shift in thinking towards more diversified production in agroforestry models, a reduction in chemical inputs and a rising interest in organic agriculture and the production of local organic inputs.

What the project achieved

The project improved the living conditions of 2'524 small producers and their families, promoted climate-smart agriculture and on-farm biodiversity (459 farmers applying climate-smart agricultural practices) and prevented deforestation and promoted reforestation. Project partner Colcocoa integrated 250 farms into its company sustainability program with Echar Pa'lante certification. Project partner Pakka optimised cocoa harvesting and quality control processes with two producer organisations and facilitated the organic certification of 131 producers in the Huila and Tolima regions. In doing so, the project supported 1'578 smallholders in complying with the requirements of the Swiss cocoa market and increased by 1'407 kg the sales of cocoa produced according to Voluntary Sustainability Standards.



“ The mentality of farmers has changed about the use of chemicals in agriculture which are harmful to health. We have changed our way of living and the example we set for our children. ”



Marcela Ortiz-Navez
36 year old farmer in Algeciras

Interview with Silvan Ziegler from Swisscontact

Silvan Ziegler, in what ways were the project's approaches new and innovative?

While cocoa is considered an important peace crop in Colombia and is widely promoted as a coca crop substitution, most interventions in the sector lack a proper market orientation. Moreover, quality and sustainable production are poorly rewarded. This project helped leverage innovations and technologies from the private sector and at the same time create long-term business linkages. This was done by providing knowledge, experience, and cross-learning among the partners, aligning efforts towards the same end, and having at its centre the consumers' preferences and the quality of life of the producer families.

What has Swisscontact learned through the project?

Among the main lessons learned, we highlight the integration of digital communication and new technologies into processes and the need to bridge the technological gap with rural communities in Colombia. This was critical within the context of restricted movement due to the Covid-19 pandemic and political unrest. All consortium partners could further mitigate such challenges by transferring technical and management skills to local partners. Having an empowered technical team in the communities and within the producers' organisations has facilitated their ownership and economic empowerment and has resulted in great relief for the continuity of the project.

What do you recommend to other stakeholders implementing similar projects?

Encouraging producers and producer organisations to carry out their own technical growth processes based on the project's activities has been a winning strategy that has been valued by them. It was perceived that, in this way, the appropriation of the contents, tools and resources provided were better understood and owned by the participants, reducing practices such as selling and exchanging the services, which we have seen in other projects. We also learned that the youth can be an important factor in bringing new technologies and innovations to the producers and helping to bridge the generational gap.

What are the next steps?

While our private sector partners will continue to source cocoa from the intervention areas and support the producers' organisation, Swisscontact is seeking solutions that go beyond individual supply chains of certified and verified production. As a next step, we will scale up the ongoing efforts and develop two pilots for sustainable sourcing landscapes where all local stakeholders in the areas are involved.



Silvan Ziegler
Project Manager, Swisscontact

“ This project helped leverage innovations and technologies from the private sector and at the same time create long-term business linkages. ”

Together, we will address sustainability challenges such as deforestation, biodiversity loss and rural development on a regional level. The adoption of income diversification measures on and off farms, and the increased involvement in decision making inside the landscapes will increase the income of producer households and their resilience to climate change and market shocks.

How was it ensured that the project has not only short-term, but long-term effects?

Both Pakka and Colcocoa are committed to expanding their investments in improvements linked to the protection, restoration and rehabilitation of forests and ecosystems. They have long-term investment plans and keep sourcing sustainable cocoa from Colombia. Both have established sustainable partnerships, involving producers, traders, processors, and retailers. Pakka co-founded Equiori, the first certified organic chocolate producer in Colombia, which has grown 100 % in the last year. Colcocoa establishes direct long-term relations with producers through its voluntary standard program “Echar Pa'lante”, verified by CERES International.



Sustainable Cocoa Sourcing Landscapes in Peru

This project supported the region of San Martin in Peru in its efforts to sustainably develop its territory. To do so, it brought together a variety of stakeholders and supported innovations on both farm and landscape levels. (Alle Bilder auswechseln)

Location

Peru, San Martin

Duration

2020-2022

Beneficiaries

2'500 farmers

Implemented by

Helvetas

Budget

Total: CHF 2.55 million,
SECO's contribution: CHF 1.25 million

What the project was about

Peru boasts 60% of global cocoa varieties, ranking second in organic cocoa production, involving over 90,000 cocoa-producing families. In Peru, San Martin stands as the primary cocoa-producing region. Despite cocoa's significance, farmers face economic hurdles and limited market access due to inadequate knowledge in cocoa bean production.

Moreover, land use change, driven by cocoa, coffee, bananas, corn, and livestock expansion, has led to substantial deforestation. Although deforestation has reduced lately, it remains a significant concern, pressuring companies sourcing from deforested regions. This project aimed to assist the regional government in achieving sustainable development, uniting stakeholders from civil society, the private sector, and national and local authorities to create a shared strategy for sustainable, diversified, and deforestation-free cocoa production systems.

What was done

The two-year project phase established an institutional framework for sustainable management in Mariscal Caceres and Tocache landscapes, San Martin Region. It formed two provincial and one regional multi-stakeholder landscape roundtables, initiating action plans for zero deforestation. The project introduced a carbon offset reforestation initiative and financial incentives for sustainable landscape management. It piloted a landscape tool for comprehensive sustainability assessment.

At the farm level, the project identified scalable sustainable cocoa production models, promoted climate-smart farming like agroforestry and natural pest control, and enhanced cadmium management. It encouraged integrated farm planning and income diversification, aiming to improve living conditions and income for cocoa farmers and families.

What didn't work or had unintended consequences

The project began during the COVID-pandemic. Building trust among partners remotely was challenging. Changes in our communication and working styles were needed. The project partners managed to find a new work rhythm, making more efficient use of virtual tools and, in one case, hiring local staff for remote work. Each stakeholder group in the landscape has different interests and ambitions. To enable joint management, was important to acknowledge these differences and define a common vision. To engage all different actors, it is important to recognise their interests and ambitions and identify a joint vision for a common action. The concept of the sustainable landscape roundtable is one of the solutions to engage all actors, striving for a balance of power and decision-making. Ensuring sustainable, deforestation-free cocoa production systems requires a transition from shifting cropping patterns to sustainable agroforestry systems. Most producers are reluctant to adopt agroforestry practices because of past experience and the associated complexity of pest and disease control and low impact on productivity gains. To overcome this issue, on the one hand, we used the above-mentioned demonstration plots.



“With cocoa, unlike coca, we work in peace, we grow in peace. Before, we lived in fear and worry. Now we plant cocoa in the middle of our forest plantations.”



Carmen Roja Luján
Cocoa farmer in Tocache



Interview with Simone Ransjin from Helvetas about the project

Simone Ransjin, what was innovative about this project?

The landscape approach based on a multi-stakeholder process, involving private, public, and civil society actors, is perceived as an innovation, especially in the areas of sustainable land use and zero-deforestation. The involvement of the international market and international private sector right from the project start is new. Moreover, on the supply chain level, an innovative approach is to support the development of a carbon accounting and reporting process from farm to end product and to promote digital innovations in production processes.

How was farmer engagement and ownership promoted throughout the project period?

The objective of the pilot phase was to generate a foundation for sustainable landscape management, based on studies, research and some first pilot actions, with the objective to be scaled up during the second phase of the project.

Therefore, the number of producers directly involved in the first phase was small. 156 farmers, directly related to project partners Choba Choba and ECOM, have been actively involved in the project, through direct training for income diversification and/or climate-smart agricultural practices and farms mapped by GPS points.

How was it ensured that the project has long-term effects?

Multiple actor commitment, through participatory methods and formalised multi-stakeholder landscape roundtables, assures the sustainability of the initiated processes. Each landscape roundtable has its own vision and action plan, aligned with the regional territorial development policy, to contribute and ensure a sustainable management of the landscape.

In the proposed second phase of the project, it is foreseen that a wider coalition with additional private partners contributes to strengthening landscape management and contributes to zero deforestation and higher farm income.



Simone Ransjin
Project Director, Helvetas

“ Multiple actor commitment, through participatory methods and formalised multi-stakeholder landscape roundtables, assures the sustainability of the initiated processes. ”



„Akuafoo Nkoosoo“ (Farmers' Success)

This project aimed at rejuvenating cocoa farm and promoted income diversification and the use of climate-friendly cookstoves. This led to an improvement in the livelihoods of 3'000 Ghanaian farming households.

Location

Ghana

Duration

2019–2021

Beneficiaries

3'000 farm households

Implemented by

Barry Callebaut

Project partners

World Vegetable Centre, Envirofit, Wageningen University, Ghana Cocoa Board, Advans Ghana

Budget

Total: CHF 2 million, SECO's contribution: CHF 1 million

What the project was about

Having over-aged cocoa trees with low yields and relying highly on few sources of income are among the biggest challenges for Ghanaian smallholder cocoa farmers. Therefore, the project aimed at improving livelihoods of 3'000 Ghanaian cocoa farming households via Farm Business Plans. It combined rejuvenation of cocoa plantations with small-scale vegetable production and use of climate-friendly cookstoves to improve farmers' income, nutrition and health.

What was done

First, farming business plans were provided to more than 3'000 farmers. Second, 900 ha of cocoa plantations were rejuvenated. In addition, a cocoa rejuvenation guide was developed in close collaboration with the Ghana Cocoa Board (COCOBOD). Third, 130'823 plantain suckers were planted within the rejuvenated plots. Fourth, vegetable gardens were set up for households, organised through 190 Village Savings and Loan Associations (VSLA), where 41% of the participants were females. Fifth, all households received improved cookstoves.

What didn't work or had unintended consequences

While farmers readily planted plantains and bananas, planting shade trees had a low acceptance. Moreover, the average volume of vegetables produced was 16 kg per farmer, which is only 6% of the original target. One reason for this was change in the intervention design: gardens were shared by members of VSLAs compared to having gardens managed by individual farmers. More fruit was then used for their own consumption and not sold on the market compared to the plan. Meanwhile, VSLA members engaged in the vegetable farming reported that the activity positively contributed to the social cohesion within their group. VSLA members also showed interest in setting up a seeds bank so that they have planting material free of charge always available. Another difficulty was to reach a more female audience. It proved to be particularly difficult for the underplanting activity, as cocoa farmers in the project are predominantly men. At the same time, female farmers are at a higher risk of indebtedness – taking a credit proved to be risky for them.



“The new stove helps me to cook on the farm for both my family and hired labourers. What I like about the stove is its lightweight which makes it easy to carry around and it produces less smoke.”

Mozamba Georgina
Cocoa farmer, 39 years old

What the project achieved

The activities led to sustaining cocoa production and improved the climate resilience of the cocoa farming households. The farmer households further benefited from energy efficient cookstoves to help them cook smarter, thereby saving money, reducing firewood usage and reducing their carbon footprint. These achievements were possible by starting with a small part of a cocoa plot to increase farmers' acceptance while limiting their risk exposure. It demonstrated that the model can sustain cocoa production while newly planted crops and trees bring additional income. However, it was key to first prune old cocoa trees heavily to keep yields from old trees going and to allow enough sunlight for newly planted seedlings to establish.



Interview with Fred Frimpong from Barry Callebaut about the project

Fred Frimpong, in what ways were the project's approaches new and innovative?

The goal of this project was to find a new approach to soften the income gap that results from cutting old cocoa trees. Instead, we promoted to gradually replace ageing, unproductive cocoa trees with new plantings. Additionally, systematically planting shade trees and bananas in rejuvenated cocoa farms created additional "pension" income and food source. The underplanting method was further complemented with other key measures such as vegetable farming and the introduction of cook stoves to foster the resilience of farmer households.

“ We highly suggest to engage beneficiaries in the activity design. ”



Fred Frimpong
Country Sustainability Manager,
Barry Callebaut

What do you recommend to other stakeholders implementing similar projects?

We highly suggest to engage beneficiaries in the activity design – only interventions which are tailored enough can be successful. Therefore, all activities must be adapted to the local social, economic and environmental context. Also, staff should use a practical approach, since behavioural change requires practical hands-on demonstrations during training and similar processes. Last but not least, we suggest to build on existing structures. In our case, we worked with local organisations such as Village Savings and Loan Associations (VSLAs) to support deployment of our activities.

What has Barry Callebaut learned through the project?

We learned a lot about what is necessary to scale up an intervention: First, farmer's available resources to invest in cocoa farms is one of the main prerequisites for scale up. Innovative financing instruments are therefore necessary to enable farmers take a leap of faith. Second, secure land and tree tenure plays a major role in farmers' willingness to invest in the future economic success of their farms. Collaboration with the government is necessary to reach some degree of scalability at a reasonable cost. And third, we believe the cocoa sector will need to engage in cross sectoral collaborations if income diversification remains one of the target impacts for the industry. We believe so because farmers report increased willingness to diversify their crops if off-take markets for their products are secure.

What are the next steps?

After the project phase co-financed by SECO, we continue our activities and aim at filling some gaps: First, we will focus on advocacy and engagement with the necessary stakeholders to enable farmers to formally register their cocoa lands. This has shown to be necessary, since tenant farmers are unwilling to make any substantial investments into their old farms as long as lands will revert to landowners when old trees are replaced. Second, we will continue to engage farmers and provide efficient cookstoves on a need basis. Since the cookstoves are mainly utilised by women, the idea going forward is to scale the intervention by engaging VSLAs to help facilitate financing and acquisition of cookstoves for additional households. And third, Barry Callebaut seeks to extend the vegetable farming component of the project to benefit 4'000 additional farmers in its supply chain. To succeed, it is necessary to provide a secured marketing avenue for farmers, since marketing is the main barrier to smallholder farmers in such endeavours.



Targeted income support to vulnerable households to reduce child labour

During this project, two innovative approaches were tested and documented: the development of a risk model to predict child labour, based on existing information about farming households, and a cash transfer programme for cocoa-growing households.

Location

Ghana

Duration

2019-2021

Beneficiaries

644 farm households

Implemented by

ICI, ECOM

Budget

Total: CHF 623'000,
SECO's contribution:
CHF 435'000

Project partners

Nestlé

What the project was about

In Ghana, the main cocoa sourcing country for Switzerland, the number of cocoa farmers and their families living in poverty and children reported to be in child labour remain high. Cash transfers are a common poverty reduction intervention, but their impact on child labour had never been tested in cocoa-growing communities. This project aimed at reducing the prevalence of child labour by strengthening the income of vulnerable cocoa growing households. It also developed and tested whether predictive models could be an effective way of identifying households using child labour, so that children at risk could be supported more quickly. Innovations in agricultural practices and farm management, and 3) the testing of innovative financial models for financing individual farmers.

What was done

The project tested two approaches. The first was to create a child labour risk prediction model based on existing information about farming households, such as farmer registers, to make it quicker and easier to identify households at high risk of using child labour. The second was to test whether cash transfers – direct payments to farming households – could be an effective type of support to tackle child labour.

To test the impact of cash transfers on child labour, the project partners set up a randomised control trial, in which about 300 randomly selected households received monthly cash transfers of around 30 USD for six months. A survey then compared these households to a similar control group who did not receive payments until later.

What didn't work or had unintended consequences

The original proposal aimed to deliver cash transfers to households identified as higher risk by the predictive model. However, since the quality and completeness of existing farmer lists was too poor, it was not possible to do this. Instead, the cash transfer was set up as a randomised control trial. This experimental approach turned out to be favourable, as it allowed to generate more robust evidence on the impact of cash on all children, not only those in child labour.

Originally, the project team hoped to deliver cash transfers through Ghana's national social protection programme, LEAP. But following consultation, officials from LEAP and other government departments advised conducting the pilot separately, since cocoa farmers in targeted communities were not vulnerable enough to meet the definition of "extreme poor" on which the national programme's targeting was based. Covid-related challenges delayed the implementation of the project. Many activities were completed later than originally planned and many households reported financial difficulties related to the pandemic, which the cash transfer programme helped them to cope with. The reduction in child labour is especially encouraging in this context, considering the pandemic caused child labour to rise in many parts of the world.

What the project achieved

First, during the project, a risk model was developed that can accurately predict child labour based on existing information about farming households. The final model correctly predicted child labour in 72 % of cases.

Second, the cash transfers significantly reduced hazardous child labour, from a baseline prevalence of 58 % at the start of the project to 49 % at the end. Third, the cash transfers helped households avoid negative coping strategies such as skipping meals and using child labour when faced with shocks. These can be loss of income due to illness, a poor harvest or a death in the family. They also increased children's material well-being as households acquired basic items like bedding and clothing for children as well as basic household goods.



“ I gave part of the money I received as allowances to my children when they were going to school and also to cover educational expenses like buying of books and pens. I didn't have much trouble taking care of my children in school within the period, even though we were in the lean season. ”



Emmanuel Obeng
Cash transfer recipient in Suhum



Interview with Megan Passey from ICI about the project

Megan Passey, in what ways were the project's approaches new and innovative?

To our knowledge, this was the first time that both approaches – models to predict child labour risk and cash transfers – were robustly evaluated in cocoa-growing communities in West Africa.

What have ICI, ECOM and Nestlé learned through the project?

We learned that cash transfers can indeed be an effective means of reducing child labour, increasing household resilience to adverse events, and improving children's material well-being in cocoa-growing communities. Their use should be scaled up, as part of a comprehensive set of measures to address the root causes of child labour, identify children at risk and provide targeted support to prevent and address child labour.

“Cash transfers can indeed be an effective means of reducing child labour.”

We also learned that child labour risk prediction is possible and that using such models can improve the efficiency of child labour monitoring. However, prediction is only possible when complete, accurate and up-to-date information exists about targeted farmers, including the sex and age of children in farming households. To benefit from the potential efficiencies of using predictive models, stakeholders first need to collect the right data and ensure it is of good quality.

What do you recommend to other stakeholders implementing similar projects?

First, when developing risk models to predict child labour, quality data is key. Before using risk models, it is often necessary to ensure that farmer records are complete and up to date. Second, whenever households invest in expanding their farms and businesses, evidence shows there is a risk that cash transfers can increase child labour, rather than reduce it. Cash transfer programmes should therefore be designed carefully to avoid adverse effects and ensure children benefit.

What are the next steps?

Following the initial success of the cash transfer project, ICI, ECOM and Nestlé are working on a second pilot to test whether combining cash transfers with interventions to increase gender equality could have an even bigger impact on child labour and child wellbeing. In doing so, we hope to fill an important gap in available evidence about how the gender of the cash transfer recipient can influence the extent to which child labour is reduced.



Megan Passey
Head of Knowledge and Learning, ICI

How is it ensured that the project has not only short-term, but long-term effects?

The primary aims of this pilot were to test two new approaches, generate robust evidence about their feasibility and impact, and share this with other stakeholders so that if successful, the use of such approaches could be scaled up. Several cocoa sector actors are already scaling up their use of cash transfers as part of multi-year programmes, suggesting that this type of intervention can be sustainably integrated into business operations in the longer-term.

Moreover, increasing numbers of stakeholders are using predictive models to target support more effectively to children at risk. Building on this pilot, ICI and several others have continued to develop models to predict child labour and use them to improve the targeting of assistance to children and families at risk. A recent report provides case studies and guidance.



Sankofa Project 1.0

The project partners promote climate-smart agriculture in Ghana through a multi-stakeholder approach, thereby scaling-up previous efforts towards income diversification, climate resilience and biodiversity conservation.

Location

Ghana

Duration

2019-2022

Beneficiaries

2'900 farmers directly benefitting,
17'400 community members
indirectly benefitting

Implemented by

HALBA (Coop), International
Trade Centre (ITC)

Budget

Total: CHF 3.5 million,
SECO's contribution:
CHF 1 million

Project partners

KKFU, Max Havelaar-Foundation
(Switzerland), Fairtrade Africa,
WWF, Ecotop, South Pole

What the project was about

This project was built on a two-year pilot that successfully introduced dynamic agroforestry (DAF) in the landscape around three municipal districts in two regions (Ahafo and Western North) in Ghana. In the pilot, 16 lead farmers were empowered to install and maintain their own DAF plots with extensive training.

DAF is a very systematic approach that is know-how intensive and is characterised by an extremely high plant density and diversity, systematic stratification, and high pruning intensity. Within DAF, the production of premium quality associated crops such as yam, maize, cassava, and plantains was promoted, accompanied by skills and technological capacity trainings. The goal was to increase the income of farmers and to improve their resilience to market and production risks.

What steps were taken during the project?

The Sankofa project introduced dynamic agroforestry and livelihood diversification through three interconnected concepts with related activities.

First, dynamic agroforestry: Combining crops and tree species with different life cycles to ensure continuous income for farmers even before cocoa trees start producing. Second, climate-smart cropping systems (CSCS): introducing the production of associated crops to diversify the income of smallholder cocoa farmers. Demonstration plots are established and capacity building training programmes on good agricultural practices are conducted. Third, development of market systems: Working directly with selected market actors to ensure markets for the crops and products produced.

How unexpected challenges were overcome and what lessons were learned

Firstly, we tackled the need to replant over 139 hectares of dynamic agroforestry plots. Factors like prolonged drought, initial seed planting, and a lack of follow-up from extension officers necessitated this replanting. To address it, we improved plot monitoring, provided additional training to extension officers, and introduced early detection systems. These challenges emphasised the importance of proactive plot maintenance and the value of investing in training and early detection. Secondly, we encountered difficulties in producing and marketing side-crops of DAF, including maize, yam, plantain, and cassava. Constraints in volume, quality, and aggregation infrastructure hindered sales to organized off-takers. To solve this, we hired a dedicated marketing and commercialisation officer at the Kuapa Kokoo Farmers Union (KKFU) level to foster strong links between project teams, monitoring and evaluation, and off-takers. This underscored the need for early coordination and dedicated roles. Lastly, governance issues surfaced within KKFU, leading to the suspension of key staff members. To address these challenges, we safeguarded cooperative assets and conducted a financial audit, recognising the importance of collaborative efforts for project stability.



“Whenever I come to the farm, I feel very happy, because dynamic agroforestry allows to grow many crops on the same piece of land and the cocoa is doing very well. Compared to conventional farms, the survival rate is very high.”



Emelia Debrah,
Farmer in Alavanyo



Interview with Raphaël Schilling from HALBA about the project

Raphael Schilling, agroforestry has gained increasing popularity over the last few years. Do you recommend other actors to promote the implementation of this cultivation method?

I recommend all actors in the cocoa value chain to promote dynamic agroforestry. Particularly in cases, where cocoa plantations need to be renovated or reinstalled because they are old, not productive and the soils are degraded. The method has the following benefits: Dynamic agroforestry enhances biodiversity, improves soil quality, and mitigates climate change through carbon sequestration. It also increases food security and provides diversified income streams for farmers through side-products such as food crops (plantain, cassava), fruit (avocado and oranges) and timber. And most importantly, it helps improve cocoa yields sustainably – without the use of fertilizers and pesticides.

“**Dynamic agroforestry enhances biodiversity, improves soil quality, and mitigates climate change.**”

What has HALBA learned from this last project phase, particularly regarding the transition from a value chain to a landscape project?

If we want long-term success and impact, we must consider the entire landscape. Establishing dynamic agroforestry on a large scale requires the support of local authorities and other stakeholders. That's why we actively engaged local and national cocoa and other stakeholders for the second phase of the project (Sankofa 2.0). For instance, we established a dynamic agroforestry test plot at the Cocoa Research Institute of Ghana (CRIG), which was convinced by this cultivation method. During our recent visit to Ghana, CRIG committed to promoting agroforestry throughout the country. This is a significant milestone. If implemented, the whole Ghana cocoa belt will benefit.

The success of the project depended heavily on close and good cooperation with producer cooperatives and national authorities. What insights can be gleaned from this experience?

The producer cooperative we mainly work within the Sankofa project is KKFU (Kuapa Kokoo Farmers Union). This cooperative has more than 100,000 members. This means that we can have great leverage if the cooperative decides to mainstream dynamic agroforestry or other good practices and approaches. At the same time, it took quite some time to gain speed. Because the organisation is so big.

The same holds true for cooperation with national authorities. It requires considerable perseverance to achieve objectives. A key takeaway is that projects typically span 4-5 years (as usual in international cooperation) are too short. Long-term commitment, which HALBA can provide, is essential. This is also possible thanks to the support from SWISSCO and SECO. When it comes to working with cooperatives, the main benefits are that you can reach a lot of smallholder farmers and have a big impact – if the cooperative is fully supportive of the project. The main challenge is the capacity building and training in sustainability of farmers. For instance, a dynamic agroforestry system needs to be managed differently than a cocoa monoculture.

We work with many smallholders. And these smallholders all need to be trained in the management practices for dynamic agroforestry. We do that via extension managers who work at KKFU. But it's a challenge to reach all smallholders involved in the project as they are partially in very remote areas and access to them is a challenge.



Raphaël Schilling
Project Manager Sustainability, HALBA

HALBA recognises the significance of diversifying farmer's income for greater resilience. The focus on granting farmer's access to markets is pivotal. Could you elaborate on the strategies and potential solutions being explored by HALBA?

We promote income diversification mainly through the implementation of dynamic agroforestry cocoa production systems. In these systems, cocoa is cultivated as the main crop together with food crops (plantain, cassava), fruit (avocado and oranges) and timber. HALBA is committed to buying the cocoa grown in these agroforestry systems. But we also promote better market access for side crops (such as plantains, cassava, oranges, and avocados). That's why a marketing and commercialisation manager will be hired at KKFU (paid in the first years by Sankofa project partner ITC).



● A holistic approach to improving cocoa farmer livelihoods in Ghana

The project aimed at improving the resilience of cocoa farmers and their families in Ghana. A holistic approach was implemented. Furthermore, a variety of activities were planned to sustainably increase production and diversify farmer income sources, tailored to the respective farmers' needs.

Location Ghana	Duration 2019-2022	Beneficiaries 50'000 farmers
Implemented by Lindt & Sprüngli, (International) AG	Budget Total: CHF 9.3 million, SECO's contribution: CHF 1 million	Project partners Sustainable Management Services

What the project was about

In 2008, Lindt & Sprüngli set up its own sustainability programme for cocoa: the Lindt & Sprüngli Farming Program. 100% of the cocoa beans in Lindt & Sprüngli's chocolates come from this program. Later, the programme was expanded from cocoa beans to include cocoa butter from the Ivory Coast. Through the program, Lindt & Sprüngli aimed to create decent and resilient livelihoods for cocoa farmers and their families and to encourage more sustainable farming practices. To achieve this, the program implements measures to increase productivity, diversify income, improve community infrastructure, reduce the risk of child labour, address deforestation and conserve biodiversity. Sustainability largely depends on the well-being of cocoa farmers. Therefore, the overall goal of the project was to improve the resilience of cocoa farmers. This was aimed to be achieved by implementing a variety of activities that were tailored to the capacities and needs of the respective farmer through a data-driven approach.

What was done

Five components increased the resilience of farming households. First, increasing farm productivity sustainably: All farmers in the program were trained or coached in selected good agricultural and environmental practices. These practices included, among others, pruning, weeding, crop and pest management, shade tree and cocoa harvest management as well as soil and health management. Farmers also received a mix of both timber species and fruit trees to plant as shade trees.

Second, diversifying household incomes: Some farmers, in addition, received training on food crop production, animal rearing or off-farm income activities to limit farmers' over-reliance on income from cocoa cultivation. Third, support with building and securing assets: Through the formation and support of Village Savings and Loans Associations in several communities, it was intended to improve the farmers' ability to save, access credit and asset acquisition. Fourth, developing a business model for product and service delivery: To tailor the projects' activities to the needs of the individual farmers, they were grouped into segments to participate in activities according to their needs and level of entrepreneurial development. The project piloted the introduction of so-called community service groups to provide pruning services.

Fifth, all farmers received volume-based cash premiums, and several deprived communities benefitted from investments in community infrastructure, providing access to basic services like water or education. All households were covered by a Child Labor Monitoring & Remediation System (CLMRS). These programs are embedded in company supply chains to identify and address child labour.

What the project achieved

First, farmers who received both coaching and Farm Development Plans (FDP) – a farm investment plan that takes in to account the unique situation of the farm and the farming family – were able to increase the productivity of the cocoa productivity by 70 kg/ha. Second, the project contributed to a greater diversification of household incomes and thus to the resilience of the farming community. Third, the measures to increase the area under cultivation using the agroforestry approach have proved effective: The agroforestry cultivation area has more than tripled from 3 000 to 11 000 hectares. Fourth, the number of households using savings accounts has doubled. The project has been particularly successful in supporting: Their number has more than tripled from under 900 to over 3 000. Fifth, households that participated longer in the Lindt & Sprüngli Farming Program generally adopt a greater number of good practices, see annual increases in yields, earn higher incomes, gain resilience, and are less dependent on cocoa cultivation.



“The project did not only help me to improve my cocoa production but has enabled me to set aside resources to grow other crops. This has made my family a direct beneficiary of additional livelihood through access to cash to support the revenue we receive from cocoa sales. It has been beneficial to my household since I started growing yam and garden eggs in addition to cocoa.”



Mary Afra
42-year-old cocoa farmer in Sunyani

What didn't work or had unintended consequences

The average cocoa yields of all assessed farmers have decreased since 2019. There have been two major contextual challenges that have affected farmers' yields and increased farmers' financial stress: high inflation and climate change. High inflation rates have increased farmers' costs of living and cost of production. In practice, this means that farmers compromise on food intake, sell assets and either reduce investments in farming and/or other businesses or increase their debt. Climate change, in turn, leads to an increased incidence of pests and diseases such as cocoa swollen shoot virus disease. In terms of specific activities, there were three additional challenges during the project. First, cash and labour constraints as well as inadequate input delivery by the government affected the adoption of good agricultural practices. Second, cash constraints, poor infrastructure, and lack of markets constrain the adoption (and impact) of non-cocoa income-generating activities. Third, the seasonal cycle of cocoa reduced the number of loans handed out by Village Savings and Loans Associations as everyone needed the loan at the same time.



Interview with Christian Mensah, from the Lindt & Sprüngli Farming Program

Christian Mensah, in what ways were the project's approaches new and innovative?

The main innovation was to develop targeted products and services, such as pruning services, to support production of different farmers, to help deliver customized advice, and to offer services at scale to enable improved farm production and digital premium payments.

What has Lindt learned through the project?

Firstly, the intervention intensity influences the outcomes. By combining interventions (group training with coaching and Farm Development Plans, Village Savings and Loans Associations with income generating activities) there is a higher chance to increase effects on yield, number of income sources and resilience. The type and combination of interventions need to be well-selected and coordinated. Secondly, practical training on off-farm income-generating activities contributes to the rural economy. Access to markets is key to this success. Thirdly, farmers have limited resources to invest in their farm maintenance or income-generating activities. They run the risk to be indebted and/or do not adopt the practices or activities. This hinders them in their way out of poverty and improves their resilience. To increase overall household income, access to larger loans as well as training in financial management, record keeping, and savings is key. Village Savings and Loans Associations are promising for improving access to finance, but may not yet be fully equipped for agricultural context such as seasonality of availability and demand of money. Furthermore, the demand for loans is not constant throughout the year. As far as this is concerned, strategies must be developed. Fourthly, different interventions have different impacts on different groups of people because people have different access to labour, land, economic resources, time, inputs, knowledge et cetera. A targeted and segmented approach is expected to increase outcomes.

What do you recommend to other stakeholders implementing similar projects?

Farmers' knowledge and assets vary widely, and farming families find themselves in very different local circumstances. Only if this is considered in the measures can living conditions be changed effectively and efficiently. For a change to happen, many preconditions need to be met. A well-chosen set of interventions brings more change than scattered activities. Farming families face many structural challenges. To overcome these, cooperation with other stakeholders and joint efforts are required.

“ A well-chosen set of interventions brings more change than scattered activities. ”



Christian Mensah
Cocoa Sustainability Representative
Ghana, Lindt & Sprüngli

What are the next steps?

Current challenges such as high inflation, climate change, high incidence of pests and diseases, inadequate input provision by government services or lack of labour remain. The structures created under the project will remain in place, but the need for additional investment and support to address new challenges prevents a phasing out of the project in the near future. We are working towards focusing activities geographically and thereby increasing effectiveness and efficiency through the strategic combination of interventions.

How is it ensured that the project has not only short-term, but long-term effects?

The following measures will be considered to strengthen the project's sustainability after its end: First, we'll mainstream key results, lessons, and best practices into the Farming Program. For example, work with partners of the Farming Program to leverage, allowing us to build partnerships for scaling up interventions. This includes access to financial services through Village Savings and Loans Associations and group empowerment. Second, we'll provide learning platforms to promote and share lessons and best practices across partners.

Third, we'll conduct further studies to design an applicable farmer segmentation model to prove the concept and business case for farmers who are willing and able to pay for the services of the Community Service Groups. In the next program phase, various mechanisms that involve savings and pre-payment will be tested. If they prove successful, they will be replicated together with other partners.



Fair and sustainable chocolate through complete transparency

This project was part of the effort to produce cocoa that provides farmers with a living wage in a sustainable way. In this context, fairness and sustainability are only possible through complete transparency along the entire value chain. To achieve this, an open source software solution called SusChain was developed.

Location

Ghana

Duration

2020-2023

Implemented by

SCHÖKI AG

Budget

Total: CHF 500'000,
SECO's contribution:
CHF 250'000

Project partners

Max Felchlin AG, Chocolat Stella
Bernrain

What the project was about

While consumers are increasingly aware of the social and ecological drawbacks of chocolate production, access to transparency along chocolate value chains remains utopian. Therefore, the purpose of this project was the development of an open-source software solution that provides complete transparency along supply chains. Through easily accessible, modern visualization of data, the software enables businesses and other stakeholders to assume responsibility for their cocoa value chain and supports responsible consumption. It therefore has the potential to counteract poverty and deforestation within the cocoa sector and beyond.

What was done

The approach of this project was the development and implementation of an open-source software solution based on modern web technologies, which provides complete transparency along the cocoa supply chain, comprehensibly visualizes the data, and is easily expandable. Data collected along the supply chains (for example details of farmers, their farms, crops, payments made for raw materials, transports, production processes up to the final products), and the resulting transparency enables stakeholders to identify challenges and successfully implement counteracting measures. One of the main challenges that can be identified is the low payment received by farmers. So for the first time, measures towards fairness and specifically a living income actually become easily verifiable.

What didn't work or had unintended consequences

The first challenge was the detailed definition of various features of the software solution. An initial catalogue of requirements was successfully worked out. However, due to the nature and complexity of supply chains and data integrity, data immutability and verifiability, these definitions needed to be adapted regularly along the way. In the end, this previously unforeseen complexity during the development process led to a solid foundation for the next years of further development.

The second and most notable challenge was the ongoing Covid-19 pandemic, which affected all team members and led to delays. Also, the implementation of pilot testing projects in Ghana and other partner countries needed to be removed from the initial time schedule. The pilot projects will now be realised by the project partners immediately after the successful completion of the various test scenarios.

What the project achieved

First, a capable partner for software development was chosen. Together, a future proof concept was developed, and a solid first version of the open-source software solution was programmed. Towards the end of the project, the software was successfully tested within a test scenario built by the project partners. The scenario was prepared as close as possible to the partners' actual cocoa supply chain. Additionally, preparations for the implementation of a pilot testing in Ghana were started.

“Despite multiple large-scale initiatives and political promises, the majority of cocoa farmers continue to live in poverty. With SusChain, the global community finally has a tool to make a sustainable difference within the cocoa sector and beyond.”



Oliver von Braun-Dams,
Co-founder SCHÖKI and SusChain



Interview with Oliver von Braun-Dams from SCHÖKI

Oliver von Braun-Dams, in what ways were the project's approaches new and innovative?

Existing solutions for transparency along supply chains mainly have the following shortcomings: lock-in effect in terms of functionality, licensing, high costs and unsuitable technical concepts. Secondly, most solutions are offered as a Software as a Service solution (called SaaS), which requires the software to be used as created without any flexibility concerning functionality. Furthermore, an unanswered but important question is the permanent ownership of data. However, our software approach is offered for free under an open-source licence. This gives everybody the ability to extend the functionality and allows users to collect, visualise and analyse data along every supply chain – as simple or complex it may be. Current and future development is therefore not in the hands of profit driven IT-companies, but in the hands of the users themselves.

What has SCHÖKI learned through the project?

As this project centres on software development, the lessons learnt mainly relate to the actual programming. However, we also learnt that the catalogue of requirements needs to be exceedingly detailed to reflect the complexity of value chains accurately. Additionally, proper and complete documentation during the programming phase is key to prevent delays and higher costs in case of unplanned fluctuations within the core team.

What do you recommend to other stakeholders implementing similar projects?

We highly recommend investing enough time into a thorough concept development and catalogue of requirements. Gapless documentation and a constant critical view on the project's milestones and goals in terms of feasibility are essential. Depending on the scope of the planned project, it can be smarter to initially focus on a smaller set of features, concentrate on the core functionality and first make this future proof, before tackling bigger questions.

What are the next steps?

Once the various test scenarios are completed successfully, the project partners will conduct pilot implementation projects within very different settings in Ghana, Uganda, and Peru – starting with Ghana. Following successful piloting, the software will be updated and finally released as an open-source solution.

“ **Our software approach is offered for free under an open-source licence. This gives everybody the ability to extend the functionality and allows users to collect, visualise and analyse data along every supply chain.** ”

How was it ensured that the project has not only short-term, but long-term effects?

To ensure the further development and sustainability of the software solution, the 'SusChain Initiative' was founded. Its founding members include some of the project partners as well as new stakeholders. The initiative will oversee and promote the use and further development of the software. So far, the solution has already raised a considerable amount of interest, even outside the cocoa industry. We therefore look forward to a successful future of this solution and are eager to evaluate its impact within the cocoa sector. Once the roll-out is completed, we aim to engage the research community to assess the effects especially on rural farmers and their environment. Together with the constant feedback by users, the systematic evaluation of impact can secure the long-term success of this solution.

Empower Your Supply Chains

Transparency, fairness, and accountability in raw material sourcing

Using cryptographically verified data and digital fingerprinting, SusChain is an open source platform enabling companies to seamlessly visualize and share supply chain information, empowering consumers to choose products that are sourced and produced responsibly and helping farming and grower communities to gain visibility and tackle poverty.

Get Involved

What We Do

A non-profit, open source, sustainability focused initiative



Innovative approaches to organic cocoa farming in Togo

The project introduced a variety of innovations for a more transparent and efficient cocoa supply chain, and to improve farm management and farmers' income.

Location

Togo, Kpalimé and Badou area

Duration

2020-2022

Beneficiaries

2'106 farm households
in four cooperatives

Implemented by

gebana

Budget

Total: CHF 481'074
SECO's contribution:
CHF 230'915

What the project was about

Gebana sources all its cocoa in Togo from organic producers. To modernise the production and to ensure the long-term stability of the organic cocoa value chain in Togo, gebana undertook a variety of innovative approaches. This included 1) the digitalisation of supply chain traceability, farmer information and payments, 2) the implementation of innovations in agricultural practices and farm management, and 3) the testing of innovative financial models for financing individual farmers.

What was done

The following activities were undertaken:
First, a digitalisation tool (SmartFarm) with a farmer data and purchase module and functions for Internal Control System (ICS) surveys and activity monitoring was successfully implemented. The aim was to strengthen traceability, transparency and organic integrity, and to facilitate farmer data management.
Second, trainings on good agricultural practices and organic pest management were held. In addition, with the support of an Ecotop expert, farmers were introduced to the dynamic agroforestry (DAF) approach. Demonstration plots were established and farmers were trained by gebana staff. The SmartFarm tool was used to document and monitor the implementation of agroforestry practices and its impact on farmers' income.
Third, in addition to the purchasing price (incl. the organic premium), all farmers received a 10 % share of the direct sales turnover from their processed product sold online by gebana.

What didn't work or had unintended consequences

The implementation of mobile payments for purchases and premiums turned out to be more difficult than it appeared at first. Many of the farmers in rural Togo are reluctant to use mobile payments. Most of the encountered hurdles revolve around a lack of trust in mobile payment systems, limited availability of mobile money agents to withdraw cash (which still is the primary method of payment in rural Togo) and limited technical knowledge of the farmers to handle the application. The relatively high transaction costs are a major barrier to the use. For premiums, gebana paid a bonus for those who received it via mobile payment, resulting in 91% accepting it. For purchases, gebana cannot pay such a transaction fee as this would reduce competitiveness towards clients.
Further, some difficulties in the adoption of good agricultural practices were encountered. While composting tests showed positive effects on the cocoa plants, the lengthy process of compost production was mentioned as a barrier to adoption. Tree pruning and phytosanitary treatments required tools that producers often did not have access to. Farmers are often old, which makes it difficult to do tree pruning. Furthermore, the cost for setting up dynamic agroforestry plots is too high for farmers. This will need continued financial support.

What the project achieved

First, through the digitalisation of farmer data and payments, traceability was increased. 2'106 producers with 2'568 cocoa plots are currently registered in SmartFarm and about 50 staff members are using the software.
Second, 254 trainings on good agricultural practices with 3'336 participants were held. Nine field schools were set up to demonstrate good cocoa production practices, compost production and application, pruning and trimming cocoa trees, and copper oxide and neem oil application trials, which showed encouraging results.
Third, 10 gebana staff and 259 producers were trained in dynamic agroforestry practices, 8 demo plots were established.
Fourth, gebana distributed FCFA 12,250,255 (CHF 18'440, on average 37 CHF per producer) to 498 farmers in 2021 and 31'608'523 FCFA (50'000 CHF) to 665 producers (on average 75 CHF per producer) in 2022. In 2022, 91% (604 out of 665) of payments for these premiums were made by mobile payment.
Fifth, the project helped to increase access to prefinance for the farmers through microcredits from a microfinance institution that can rely on data from the SmartFarm tool. It developed a concept for a harvest fund based on crowd investment, which has not yet been implemented.



“ I own 4 hectares of land. Last year I had to take a loan for my farm. I have now used two-thirds of the 164,000 CFA (about 250 Euro) of the additional gebana premium to pay off that loan. gebana should try to create an even bigger market for organic cocoa. ”



Souley Djideal

35 years old, cocoa farmer in Togo



Interview with Michael Blaser from gebana about the project

Michael Blaser, in what ways were the project's approaches new and innovative?

The following three components of the project were new and innovative: First, technical innovation: The use of smartphones in the relationship between the farmer and the buyer company was new in the cocoa sector in Togo. Two cooperatives will start using the software for managing their internal control system and farmer data. This data will be linked to gebana.

Second, farm management innovation: Until the implementation of this project, the cocoa farmers gebana works with in Togo had never participated in agroforestry training. Expanding the focus beyond cocoa and diversifying the crops and learning ways to produce side products helps increase the income and resilience of farmers. Third, financial innovation: The approach of sharing a certain percentage of the turnover from the sales to the final consumers with the farmers is not a commonly used practice in the cocoa sector. This additional premium payment was made directly to the individual farmer.

“ It takes time to change behaviour. ”

What do you recommend to other stakeholders implementing similar projects?

Before imparting practices, one should exchange with farmers about the practices: what are the practices about, what are the benefits, and understand whether they are of interest to farmers and why (not). It makes sense to prototype practices in a smaller scale to understand if proposed solutions are desired by farmers, economically viable, and technically feasible. If necessary, adapt the solution. Only once these goals are met go for scaling of the solution. It is important to understand from the beginning why farmers are currently not using mobile payments and whether or not they might be willing to change. Once the barriers are understood, it can be assessed whether they can be overcome. Collaborating with the mobile phone companies to ensure that sufficient pay-out service providers are available, and to sensitise farmers on the benefits, was key to the success in mobile payments for gebana premiums. The benefits of mobile payments for purchases did not seem to be sufficient to convince the farmers.

What has gebana learned through the project?

While in theory, some improved farming practices should be beneficial to farmers, it does not necessarily mean they will adopt them. Some practices imparted to farmers as part of this project were not widely adopted for several reasons, including the age of farmers, availability of equipment and general reluctance of farmers to change their practices. Further, introducing payments via mobile phone can be very difficult in a country where the use of mobile payment is not widely adopted in rural areas.



Michael Blaser
Head of Projects, gebana

It takes time to change behaviour. For purchases, it remains challenging, as we are competing with buyers who pay cash. It proved easier to convince farmers to accept mobile payments for gebana premium payments, as farmers are welcoming any additional income.

What are the next steps?

We will continue to collaborate with the farmers which were involved in this project and will ensure follow-up activities for all three components of this project by: First, providing refresher trainings for gebana's field agents to improve their skills in recording production and collecting data in the SmartFarm application. Second, supporting farmers with organic pest management, as well as providing trainings on good agricultural practices. Third, expanding the support for dynamic agroforestry (DAF) by establishing 40 new plots in 2023 and promoting „DAF-light“ practices such as pruning, mulching, and crop diversification. Fourth, continue using mobile payments for paying out premiums to farmers and testing if this can be done directly through the SmartFarm app in 2023. Fifth, facilitating contacts to financing institutions for other cooperatives in need of financing for issuing credits based on the information registered in SmartFarm.

How is it ensured that the project has not only short-term, but long-term effects?

gebana will continue its engagement with the farmers in Togo and thus ensure the long-term sustainability of the implemented approaches. gebana has several clients with commitments over several years for increasing volumes. This gives the basis for the work with the farmers on quality, yield and income.



Village Cocoa Competence Centers

During this project, two village-based competence centers introduced. The centers now serve as post-harvest processing facilities, produce and distribute high quality cocoa and shade tree seedlings, offer training and consultancy services, provide access to saving schemes, and sell agricultural tools and inputs.

Location

Côte d'Ivoire, Nawa region

Duration

2019-2022

Beneficiaries

1'461 farm households

Implemented by

CABOZ

Budget

Total: CHF 1'075'000,
SECO's contribution:
CHF 500'000

Project partners

SCOPACI, AGECE Humanis, ETH
Zürich, CABOZ Action

What the project was about

In Côte d'Ivoire, the heart of global cocoa production, farmers usually ferment and dry their own cocoa before selling it to buyers. Quality varies widely and prices are low. In addition, cocoa plots are usually grown in monoculture and are overaged, while the practice of agroforestry and the use of shade trees is rare. The project aimed to trigger change in order to improve farmers' income and increase the quality of the cocoa.

What was done

CABOZ – a Swiss company helping its customers to set up direct and sustainable cocoa supply chains – and its partners established two village-based competence centers in the Nawa region in Côte d'Ivoire. The centers now offer a wide arrange of services to farmers, which includes:

- First, buying wet cocoa from farmers and fermenting and drying it in a standardised method in newly built facilities, before selling it to customers
- Second, training of farmers in good agricultural practices.
- Third, supporting farming communities to produce high quality cocoa seedlings and shade trees to rejuvenate and diversify cocoa plantations.
- Fourth, running newly established savings groups combined with support in income generating activities and financial literacy trainings.
- Fifth, selling agricultural tools and inputs to farmers in new shops associated with the competence centers.

What didn't work or had unintended consequences

The volumes processed at the two fermentation facilities during the three-years project were below expectations, at 42 % compared to the target. One reason was the widespread mistrust of farmers in the weight relation between wet and dried cocoa. Another reason was the difficulty of CABOZ finding a customer who is willing to pay a higher price for the improved quality coming from the centres. This made CABOZ reluctant to buy more fresh cocoa from farmers, fearing financial losses in a market that is characterised by low margins.

Also, the originally planned establishment of mobile savings accounts for the payment of premiums was abandoned due to the low acceptance and high costs of mobile payment systems in Ivory Coast. Instead, village savings groups and loan associations were created, which have proved to function very well and are very popular.

What the project achieved

During the three years of the project, the following results were achieved:

- First, 127 tonnes of fresh cocoa purchased from 305 farmers were processed at the fermentation and drying facilities of the two competence centers.
- Second, 1'461 farmers received training in farm rejuvenation, income diversification, climate change resilience and the integration of shade trees in cocoa plantations.
- Third, farming communities produced 444'563 cocoa seedlings that were distributed to 1'148 farmers. Of these, 98.6 % survived in the field and allowed 333 ha of overaged plantations to be rehabilitated (0.29 ha per farmer).
- Fourth, 26'784 shade trees were produced, of which 67 % survived in the field.
- Fifth, 744 jobs were created, most of which are day-labourers.
- Sixth, 17 savings groups were established with 595 participants, 282 of them women.
- Seventh, two warehouses were built next to the fermentation facilities, supplied with 35 tonnes of fertiliser.



“ We ensure long-term knowledge transfer and innovative ideas by working with local staff and involving farming communities directly in the project. ”



Daniel Stähli
CEO of CABOZ



Interview with Daniel Stähli, CEO of CABOZ

Daniel Stähli, in what ways were the project's approaches new and innovative?

Our approach was new since village based centralized fermentation is uncommon in Côte d'Ivoire. Our competence centers not only provide various services to farmers, but also lead to a higher quality of cocoa. Moreover, in setting up the competence centers, the role of CABOZ as a sourcing company is changed from that of a mere trader with a loose relationship with the farmer to that of a service-provider with a permanent local presence, close to where farmers live and work. This improves our collaboration with the farmers, to the benefit of all.

What has CABOZ learned through the project?

To make such projects successful, it is key that farmers have a short and long-term benefit. For example, we have overestimated the importance of the time saved for the farmers by centralised fermentation. Some even felt that their self-perception as working farmers was disturbed. The main leverage is the price, so farmers must have a substantial financial advantage from participating. The same is true for our customers. Improved physical and aromatic quality is not much rewarded in the Côte d'Ivoire context. Value propositions rather include aspects like higher farmer income, no deforestation and child labour prevention and monitoring.

What do you recommend to other stakeholders implementing similar projects?

To avoid the problems elaborated above, we suggest investing in simple communication combined with rumour management. This is key when it comes to overcoming people's mistrust or reluctance to participate in a project.

What are the next steps?

Despite the lower volumes fermented than planned, we continue running the competence centers with its various services. To make it an economically sustainable and scalable model, we have invested into the planning of production plants to extract cocoa juice from fresh cocoa delivered to the centres. Our calculations show that revenues will allow us to keep the cost for the fermented cocoa at market prices, while still enabling us to offer farmers a higher price as a step towards a living income.

“ To make such projects successful, it is key that farmers have a short and a long term benefit. ”

In addition, in a new three-year project phase financed by our main customer Bahlsen, we will shift from a focus on cocoa to a more holistic approach towards dynamic agroforestry. This is due to the fact that many farmers continue to view shade trees as competitors to cocoa trees and do not support agroforestry without an economic value visible from the outset.

How is it ensured that the project has not only short-term, but long-term effects?

We ensure a long-term transfer of know-how and innovations by working with locally recruited staff and by integrating farming communities directly into the project. Also, we have shifted the production of tree seedlings from a central seedling farm to smaller community-based seedling sites, which involves the communities even more closely in the project. As we are only rejuvenating ¼ ha per farm, the project aims to motivate farmers to continue rejuvenating and diversifying the rest of the farm on their own, based on the experience gained through the project. As for the competence centers, with additional values generated through the extraction of cocoa juice from fresh cocoa, the centralised fermentation of cocoa will prove to be an economically sustainable strategy. And last but not least, the Village Loan and Saving Groups and microbusinesses function largely independently after three years, requiring just little continuous support.



Protecting natural resources and increasing farmers' incomes

The aim of the project was to promote the sustainable use and protection of natural resources through the targeted payment for environmental services (PES). The piloting of the PES approach aimed at increasing the diversification of income sources for cocoa farmers and improving the carbon footprint within the companies' supply chains.

Location Côte d'Ivoire	Duration 2020-2022	Beneficiaries 600 farm households
Implemented by Barry Callebaut	Budget Total: CHF 781'000, SECO's contribution: CHF 300'000	Project partners Mondelēz, Impactum

What the project was about

The project had a combined focus on stopping deforestation and providing cocoa farmers with an alternative income in rural Côte d'Ivoire. The objectives were first to sensitise and train producers and local communities on climate change, second to promote and create agroforestry among producers, third to contribute to forest restoration, fourth to support local communities in the sustainable management of natural resources through the development of Local Land Use Sustainable Plans (LLUSP) and fifth to contribute to the diversification of producers' sources of income. The project combined the following approaches: Payment for Environmental Services (PES) and the reduction of the carbon footprint within the supply chain (Carbon insetting benefits).

What was done

The objective was to improve ecosystems by reducing carbon emissions from deforestation, sequestering carbon through on- and off-farm restoration and preserving biodiversity and water. The PES scheme provided farmers with additional resources to manage their agroforestry systems and to protect standing forests.

The following activities were conducted:

First, awareness raising and engagement of the community members about climate change, deforestation, forests, agroforestry, land codes and PES. Second, establishing the organisational framework for the local PES project. Third, supporting the implementation of Local Land Use Sustainable Plans (LLUSP), with the objective to create cocoa-based agroforestry, reforestation and conservation of residual natural forest. Fourth, monitoring, evaluation, learning and communication activities for measuring impact and scaling up, including carbon impact monitoring and measurement.

What didn't work or had unintended consequences

The main challenges were related to logistics, changing weather patterns and what is called enablers (e.g. land tenure security). While the first two challenges caused delays in the delivery of results, land tenure activity could not be delivered within the project time frame and budget. Overall, land tenure insecurity remains one of the main inhibitors for farmers and their willingness to set up agroforestry systems. Finding a solution to recognise farmers' rights and setting up a formal agreement with legal owners of the land on which they farm is currently not scalable due to the high cost and lengthy process, which can take up to 18-24 months.

Further, a PES scheme was successfully implemented but did not deliver on its initial hypothesis, as it did not significantly increase farmers' income. The volume of payment resulting from PES to individual farmers was low and did not cover costs associated with agroforestry management. Thus, the objective to diversify farmers' income was only partly achieved and results on additional income generation from crop diversification will only be possible to assess in the future. For further projects, Barry Callebaut will pay higher PES amounts.

What the project achieved

First, a critical mass of at least 1000 local actors in the project area was sensitized to climate change. Second, 1,200 ha of cocoa agroforestry systems were established. Third, 15 ha of native forest were conserved through collective and individual PES contracts. Fourth, 90 ha of land were reforested. Fifth, two Local Land Use Sustainable Plans (LLUSPs) were implemented in a participatory manner. Sixth, establishment of a PES scheme.



“ We recognised the importance of involving farmer cooperatives, as they are the main reference points for cocoa farmers and can help increase farmer interest and acceptance. ”



Tilmann Silber
Global Lead „Thriving Nature“,
Barry Callebaut Group



Interview with Tilmann Silber from Barry Callebaut about the project

Tilmann Silber, in what ways were the project's approaches new and innovative?

Payments for Ecosystem Services have tremendous potential to better include and compensate farmers for activities that have benefits both for local ecosystems and the global climate. This project was to our knowledge the very first one testing PES approaches at a significant scale in cocoa-growing communities in West Africa. By including different activities (agroforestry, restoration and conservation), the project shed light on the effectiveness of PES in different cases. Particularly when combined with carbon finance such as insetting approaches, we believe that PES will play an important role in transforming the cocoa sector to a more sustainable future.

What has Barry Callebaut learned through the project?

We recognised the importance of involving farmer cooperatives (or similar institutions), as they are the main reference points for cocoa farmers and can help increase farmer interest and acceptance. In addition, involving local government representatives such as forestry and natural resources officials proved beneficial, particularly in areas where land ownership disputes arose. Additionally, farmers often have limited human and time resources to invest in their cocoa plots (e.g. farming inputs, pruning etc.), including the establishment of agroforestry systems. Going forward, we aim to increase our technical support on e.g. planting and pruning. Meanwhile, a balance needs to be found to ensure sufficient engagement of participating farmers. They need to also own the activities and invest own time and effort.

What do you recommend to other stakeholders implementing similar projects?

When designing and implementing a similar project, we would recommend to first involve farmers in agroforestry design - especially tree species preferences can vary from region to region, second consider difficult logistics associated with land use and remediation activities, and third keep exploring most efficient PES schemes. This could be different amounts of cash payments, but also alternative rewards, such as in-kind benefits like farming inputs, tools, and basic community infrastructure. Furthermore, to increase the engagement of actors in the cocoa sector in alignment with the science-based targets initiative (SBTi), we recommend channelling joint sectoral investments into interventions which generate ecosystem services. Novel scope 3 impact accounting methodologies, integrated into various standards, make it possible to account for and report on the impact of ecosystem services for multiple actors.

What are the next steps?

At Barry Callebaut, we have already started to strongly scale-up a modified version of the PES approach for agroforestry across Ivory Coast and Ghana, based on the learning of this project. Regarding PES for restoration and conservation, we need to further explore pathways for scale-up.

“ **Payment for Ecosystem Services have tremendous potential to better include and compensate farmers.** ”

How is it ensured that the project has not only short-term, but long-term effects?

The following measures will be considered to strengthen the project's sustainability after its completion: First, evaluating potential for market access: Having off-take markets for non-cocoa products is essential for farmers to engage in agroforestry. Barry Callebaut will explore options for establishing market linkages and cross-sectoral partnerships. Second, expanding the farmer coverage: Barry Callebaut has an agroforestry commitment and a program to reach this commitment.

Our implementation strategy is to reach high farmer coverage within a geographical location to increase intervention efficiency. Third, leaner PES infrastructure: Barry Callebaut will explore the option of re-designing the PES infrastructure. We will test using the cocoa mobile money (used to pay out sustainability premium) and have a process in place for farmers with no mobile money accounts.



An integrated and strong landscape approach: The Green Nawa Initiative

Cocoa production in Côte d'Ivoire has witnessed significant growth over the years. However, there are serious and persistent sustainability concerns. This project seeks to address these issues by implementing a comprehensive program that places farmer families at its core and employs innovative methods.

Location

Côte d'Ivoire, Nawa region

Duration

2020-2023

Beneficiaries

14'929 farm households

Implemented by

FarmStrong Foundation

Budget

Total: CHF 763'838,
SECO's contribution:
CHF 300'000

What the project was about

The project's core objective was to introduce integrated sustainable farming systems within a regional landscape model in the Nawa region over a three-year period. With a traceable sourcing system, it employed innovative solutions, including technology like LiDAR calibrated satellite image assessment, mobile financial transfers, GPS addressing, and wireless sensors. This aims to benefit cocoa farming families and their ecosystem through synergies.

Notably, the project prioritises empowering women and youth in adopting social and environmental practices. Leveraging local insights, it is designed to be scaled up. The project is backed by local and regional authorities as well as multilateral agencies. Implementation involved a dedicated team of locals. They were supported by stakeholders, ensuring a successful and replicable outcome.

What was done

Before starting the project, cooperation was initiated with both government representatives and traditional leaders. Local and regional entities were embedded, as well as national institutions such as Ministère des Eaux et Forêts (MINEF) and the Société de Développement des Forêts (SODEFOR). This was to establish a shared understanding of the local context. It also identified areas for intervention. Upon starting the project, various activities were implemented across distinct areas, spanning from cocoa traceability and the implementation of village savings and loans associations (VSLA) to agroforestry system development in the region. Additionally, we started with the restoration of the badly degraded "foret classée" of Mont Kourabahi. Throughout these initiatives, we actively engaged local communities, including youth and women.

What didn't work or had unintended consequences

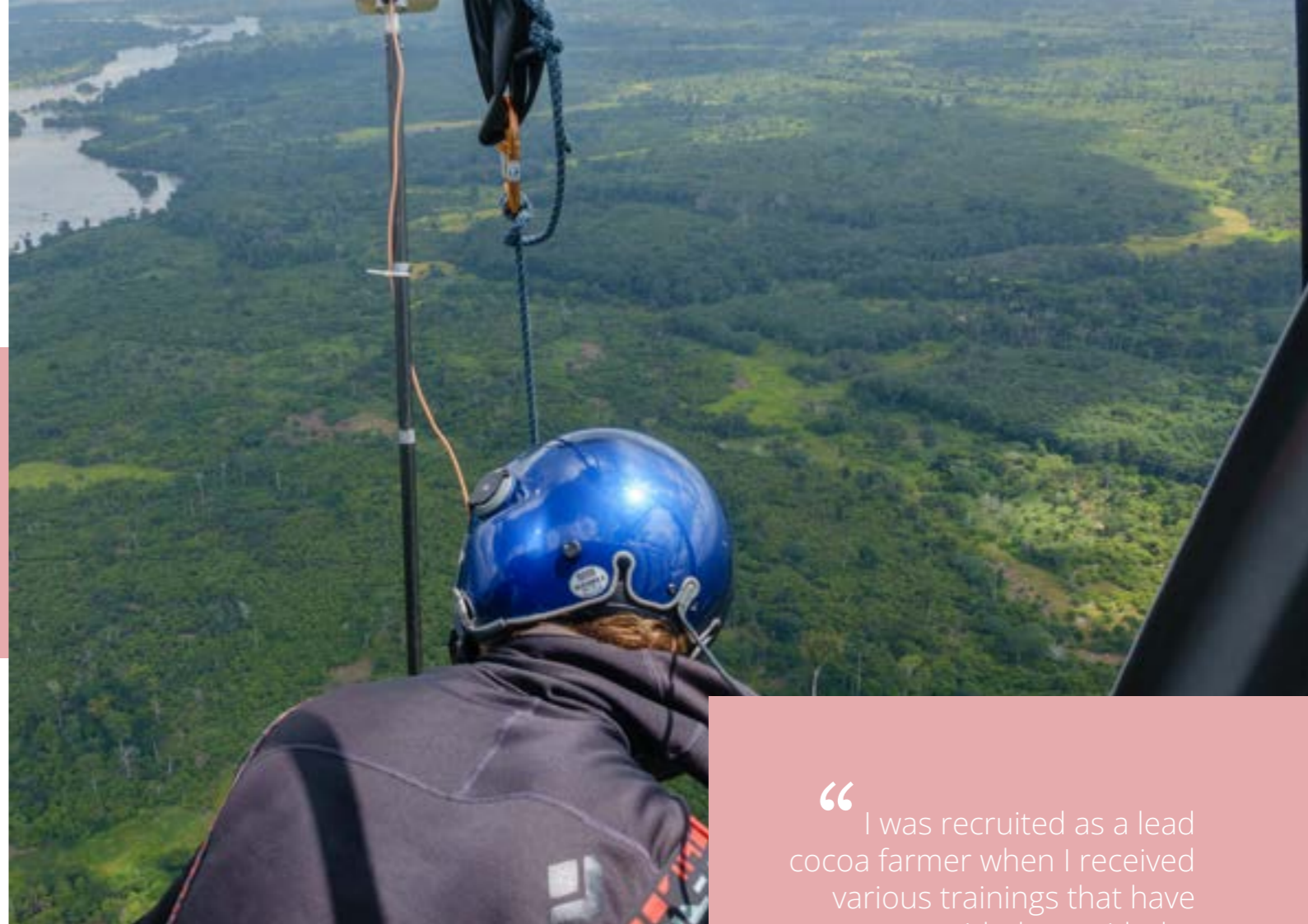
Upon initiating the payment procedures, we quickly encountered the reality that not all participants in our programs have access to bank accounts or mobile financing. Many farmers in Côte d'Ivoire don't have government-recognised photo identification documents. While we have helped many of the farmers obtain mobile bank accounts, there remains significant work to ensure all farmers can access this system. To meet this challenge, we have introduced a pilot with direct debit cards and normal bank accounts.

An alternative to the formal banking system are the Village Savings and Loans Associations (VSLA). These associations enable individuals and groups in local communities, who don't have access to financing or savings accounts, to benefit from VSLAs, which allows members to save and borrow money for income-generating projects. These alternative systems to the official financial structures are crucial for local community development, as limited access to „official“ funding hinders local economies and impedes progress in these remote areas of Côte d'Ivoire.

What the project achieved

FarmStrong's programs prioritise the establishment of a sustainable ecosystem from a regional standpoint. When this principle is upheld, and the ecosystem within which operations are conducted is based on sustainable practices, the sustainability of not only cocoa production but also other (food) crops grown under the same umbrella, is ensured. It is crucial not to overly focus on a single supply chain, but rather adopt a broader landscape approach with multiple value chains. This approach encompasses, amongst others, the understanding of the constraints that impede rural socio-economic development.

Simultaneously, it involves constructing a program that integrates environmental stewardship, climate change risk awareness and a protective social framework, supporting the entire regional agricultural production system. This systemic approach on a regional scale considers not only cocoa but also food, health, nutrition, and every aspect that contributes to a holistic perspective.



“ I was recruited as a lead cocoa farmer when I received various trainings that have provided me with the necessary expertise. I was fortunate to later manage a tree nursery with three young individuals assisting me in the nursery. These two activities have granted me an income to support my wife and our four children. I enjoy it and I'm learning a lot. ”



Mady Laga

Lead cocoa farmer in Kodaya



Interview with Michiel Hendriksz from FarmStrong Foundation about the project

Michiel Hendriksz, what is innovative about this project?

The project is innovative in four dimensions: first, it is aimed at the entire population of these rural communities, not necessarily specific members of a cooperative within communities but the community as a whole. It gives us a much higher membership density compared to the cooperation with cooperatives.

Second, we use several high-tech earth observation (EO) technologies. We detect forest disturbances, degradation and deforestation. Moreover, we are piloting EO use in child labour risk assessment. Third, the way we do the situation analysis (not just a need assessment) in those villages is not necessarily supply chain-related. So, we look what are the issues these people are really facing (social, health, nutrition, economic, financial, and agriculture). Agronomy is seldom the most important bottle-neck. Based on the situation analysis we set up the program to deal with these bottle-neck constraints in a sequence which creates a fast and efficient positive impact on the issues faced by the population.

Fourth, we use the revenues of CO2 sequestration in non-agricultural biomass. These revenues are used to pay the farmers a substantial additional income. They can also be used to invest in community infrastructure (birth certificates, land certificates, health).

What has FarmStrong learned through the project?

The key to succeeding in these highly complex ecosystems is to ensure that everyone is on board. It's crucial that everyone understands what, why and how we are doing it, and how long it will take to accomplish it.

This means that both the private sector (whether international or local), the public sector and multilateral organizations, including non-formal government systems such as traditional village chiefs and their village committees are of utmost importance. They will play a pivotal role in motivating the population to join our efforts. Moving up the hierarchy, the „sous-prefet” is also crucial to engage, as they represent the first level of formal governance in these countries. Beyond that, the prefecture is essential. A bottom-up approach is vital for the success of these programs, including engagement with key non-official governance structures.

How was farmer engagement and ownership promoted throughout the project period?

Farmers will only commit and become positively involved in these programmes if they understand the benefits for themselves, their families and their communities. They will not adopt imposed measures that are not in their interests. The lowest take-up rates are directly linked to the fact that farmers

are not involved in setting up the structure and that they are dealing with perceived problems (through Western eyes) but not with their real problems. One needs to uproot the root causes of these issues, the drivers of the problems, not just look at the symptoms of the consequences. If you understand the real issues and come up with real solutions for the farmers, families, and communities, they will be fully engaged.

How is it ensured that the project has not only short-term, but long-term effects?

Programs in these ecosystems take a lot of time to develop and to get started, as we have to understand first what the real issues are. You continue working with the families and the communities to move in a direction which will have a visible and noticeable positive impact on the communities themselves.



Michiel Hendriksz
CEO, Farmstrong Foundation

“ Farmers will only commit and become positively involved in these programmes if they understand the benefits for themselves, their families and their communities.”



Climate resilient cocoa landscape in Madagascar 1.0

This project aimed at collectively engaging the local stakeholders in the development of a sustainably managed landscape in the Sambirano Valley. Based on an in-depth landscape assessment, a coalition supported local-level dialogues among multiple stakeholders to formulate a common vision for the landscape and to establish a landscape governance mechanism.

Location Madagascar	Duration 2020-2022	Beneficiaries 2'200 farm households
Implemented by HELVETAS Swiss Intercooperation	Budget Total: CHF 580'000, SECO's contribution: CHF 300'000	Project partners Lindt Cocoa Foundation Fonds, Solidaire Valrhona SAS, CDE University of Bern, Earthworm Foundation

What the project was about

Sustainable cocoa production in a multifaceted landscape can only be ensured if stakeholders from the civil society, the private sector, and national and local authorities have a common strategy for the landscape they are acting in. The project thus supported the development of a governance mechanism based on local level dialogues among multiple stakeholders and the elaboration of a common landscape level planning instrument to ensure coordinated action for the long-term safeguarding of ecosystem services in the Sambirano landscape.

What was done

The project worked towards a common vision for the landscape through a consultative and locally rooted multi-stakeholder process among multiple parties across sectors. A functional and institutionally anchored landscape-level governance body was built to ensure coordinated action: the Comité de Gestion du Bassin Versant du Sambirano (COGEBS).

Based on an in-depth landscape assessment, priority zones for conservation and carbon stock and ecological restoration were identified. They were incorporated into integrated conservation and land use plans at a landscape scale to guide the identification of coordinated landscape restoration interventions.

The landscape assessment, the multistakeholder landscape-level dialogue and the establishment of a governance mechanism were important prerequisites to leverage long-term support for landscape-level ecological restoration and livelihood strengthening around the cacao economy of the valley.

What didn't work or had unintended consequences

Female participation in the local consultation process presented a persistent challenge. The goal of achieving a higher level of women's involvement proved difficult to attain, primarily because of the prevailing gender inequality within the community. Regrettably, only two of the three planned actions could be carried out as originally intended. These actions, which included the implementation of protective measures along river shores and the initiation of a land titling operation, were affected by delays brought about by the COVID-19 pandemic, which hindered the timely completion of the landscape assessment.

What the project achieved

The establishment of the Comité de Gestion du Bassin Versant du Sambirano (COGEBS) serves as the central governance mechanism, representing the communes, central ministries, economic operators, and industry platforms. This entity was founded through a multi-stakeholder process and has received formal recognition from the Regional Government.

The in-depth landscape analysis revealed the current landscape uses, identified priority actions and areas, including High Conservation Value (HCV) and High Carbon Stock (HCS) areas, and provided recommendations for its sustainable management. Furthermore, two pilot interventions, identified through a participatory process, have been implemented. The first involves protective measures along river shores to prevent the loss of cocoa plantations, employing affordable nature-based solutions. The second intervention focuses on a concerted land titling operation.

In total, 2'200 farmers have received training on agroforestry systems, revenue diversification, and climate-smart agriculture, contributing to more sustainable and resilient agricultural practices.



“ A solution is only sustainable if all the stakeholders find their respective interests. ”



Myrs Rasolofo,
Local project manager



Interview with Maya Wolfensberger, Senior Advisor Climate Change at HELVETAS

Maya Wolfensberger, you provide strategic advice to the landscape project and coordinate the collaboration with the involved partners. In what ways were the project's approaches new and innovative?

Past and current conservation and livelihood initiatives have been mainly top-down with limited public engagement. Working towards a common and locally rooted vision among multiple parties across sectors in an entire watershed is a new approach, not only for Madagascar. Moreover, the project does not only look at the symptoms, but tackles the multiple root causes hindering the implementation of restoration and conservation, such as the lack of land tenure security, and lack of incentives for stakeholders to preserve the ecosystem.

What has HELVETAS learned through the project?

I think in retrospect, we were too ambitious in terms of what can be achieved in two years. For example, we had the idea that we could already translate the landscape analysis into a formal landscape-level management plan. The latter takes much more time in Madagascar.

What do you recommend to other stakeholders implementing similar projects?

Landscape processes have to be planned with a long-term perspective. The real impact will only materialize over time. This requires that you work with donors and companies willing to invest in the long-term, realistically 10 or even more years. Expectation management is also important towards the beneficiaries, who may be frustrated if impacts are not tangible right away.

“ **The project does not only look at the symptoms, but tackles the multiple root causes hindering the implementation of restoration and conservation, such as the lack of land tenure security, and lack of incentives for stakeholders to preserve the ecosystem.** ”



Maya Wolfensberger
Senior Advisor Climate Change,
HELVETAS

What are the next steps?

This project reflected the kickstart for an ambitious initiative which is broadly supported by the private sector, regional authorities, and international donors. The initiative continues now in the second phase of four years, which has been approved by SWISSCO under the new call for landscape projects. The new phase that started in June 2023 will have a focus on landscape restoration and a sector-wide adoption of climate-resilient farming practices and agroforestry systems reaching out to over 5'000 cocoa farmers.

How is it ensured that the project has not only short-term but long-term effects?

Helvetas only acts as a facilitator of a long-term process based on a shared vision among stakeholders. The local landscape governance mechanism ensures the continuation beyond the project.



Salama Mateza

This project in northern Madagascar has given 880 farmers and their families access to comprehensive health insurance. This guaranteed them high-quality health care. The project, which has now been completed, will be continued and financed independently.

Location Madagascar	Duration 2021-2023	Beneficiaries 880 farm households
Implemented by mTOMADY	Budget Total: CHF 48'000, SECO's contribution: CHF 33'400	Project partners Sambirano SA, Max Felchlin AG

What the project was about

Access to health care as a human right is still not guaranteed for many farmers. To achieve the goal of Universal Health Coverage (UHC) by 2030, health systems need to become more resilient and sustainable. In Madagascar, many people do not have access to health care because it is very expensive. Smallholder farmers in particular are excluded from comprehensive health insurance.

Through the digital platform mTOMADY, which connects beneficiaries to different health financing mechanisms, project partners have been able to contribute financially to the health care of cocoa farmers - even in remote areas.

What was done

Max Felchlin AG and its customers worked with Elucid and its partner mTOMADY and the Sambirano cooperative to provide health insurance to farming families who produce cocoa for Felchlin's Madagascar couverture.

This worked as follows: Beneficiaries registered by mobile phone number or membership card, which gave them access to a digital money box and a certificate of insurance. Health providers identified beneficiaries with smartphones/tablets, submitted claims to the health insurance company and received reimbursements through the mTOMADY platform. This both improved the transparency of payments and made it easier to track utilisation and thus identify the need for health services. Data protection remained guaranteed: The health data was only passed on in aggregated form and could not be traced back to the individual.

What didn't work or had unintended consequences

At the start of Salama Mateza's implementation in May 2021, the project partners initially relied on the local mobile network to register farming families. However, since January 2022, Elucid, together with partner mTOMADY, has significantly improved offline accessibility to meet the needs of farming families and health providers with limited access to mobile phone infrastructure. Since then, all processes run offline, including the registration of farm families and submission of disease cases. Data is stored securely until a mobile phone connection is available for uploading. Instead of SIM cards to access health services, an alternative solution was introduced. In a collaboration between Elucid and mTOMADY, all farming families were provided with a membership card. This has streamlined access to care and eliminated the need for a phone, overcoming connectivity and trust barriers in these communities.

What the project achieved

In the Diana region of Madagascar, 880 cocoa farmers and their families were enrolled in a local health insurance scheme that covers up to 80% of health costs in participating facilities. In total, more than 8569 treatments were carried out, most of them to combat malaria, influenza or diarrhoeal diseases. In total, more than 57 families were protected from extreme poverty through the Salama Mateza project.



“The program encouraged me to visit the hospital when I was sick and not stay home. Without this, my child would not have been born.”



A 24 year old female farmer in Sambirano



Interview with Mirko Schneckenburger from Max Felchlin AG

Mirko Schneckenburger, in what ways were the project's approaches new and innovative?

The Salama Mateza project provided financial access to health care for the first time in remote communities in northern Madagascar thanks to the existing mobile infrastructure. Thanks to the network of local staff and health workers, barriers to financing and infrastructure were reduced. A real-time impact dashboard tracked health service utilisation, disease prevalence and expenditure for beneficiaries. At the same time, an up-to-date database on farms was made available. This improved data quality. In addition, the incentive of health care strengthened the farmers' ties to local enterprises.

What has Max Felchlin AG learned through the project?

We in Europe usually take functioning health care for granted. This is quite different in Madagascar, where the cost of treatment often threatens the very existence of the people. This new form of support quickly met with broad acceptance and the project can be described as extremely successful. We have learned that investing in health insurance generally improves the living situation of the local population because this huge cost item can be reduced considerably.

What do you recommend to other stakeholders implementing similar projects?

One challenge is certainly the geographical distance and the fact that our understanding of health care and the associated processes are very different from those in the country of origin. It is worthwhile to make sufficient time and resources available and to see for yourself on-site. This is particularly helpful for our own understanding of the situation and for any communication.

“The experience gained will also serve to implement similar commitments in the cocoa-growing regions of Ghana.”



Mirko Schneckenburger
Head of Marketing & Communications,
Max Felchlin AG

How was it ensured that the project has not only short-term, but long-term effects?

Max Felchlin AG's goal was to make the project financially independent within six years. Due to the positive progress, we achieved it after only two years. Since our partner organisation Sambirano SA has launched another project, „Salama Jiaby“ (Health for All), to enable more people, especially the elderly, to have access to health insurance, it was decided to continue both projects under one roof in mid-2023.

The project partners and SWISSCO welcome this step, as it is important that such projects are lived and supported locally. The flow of information and transparency remain guaranteed, and Max Felchlin AG and Sambirano SA will continue to work closely together to initiate further successful projects. The experience gained will also serve to implement similar commitments in the cocoa-growing regions of Ghana.





Swiss Platform for Sustainable Cocoa



Schweizerische Eidgenossenschaft
Confédération suisse
Confederazione Svizzera
Confederaziun svizra

Swiss Confederation

Federal Department of Economic Affairs,
Education and Research EAER
State Secretariat for Economic Affairs SECO