Issue Brief
2025 #1

Swiss Platform for Sustainable Cocoa

AGROFORESTRY IN COCOA

Perspectives and Solutions

February 2025

Key Messages

Benefits

Agroforestry systems in cocoa cultivation offer numerous advantages over conventional full sun cropping systems. Environmentally, they contribute to carbon sequestration, improve soil quality, and enhance resilience to climate change. By providing shade, these systems reduce heat stress on cocoa plants and lower their vulnerability to pests and disesases. For cocoa farmers, agroforestry systems bring economic and social benefits. They support diversified incomes through the cultivation of complementary crops, which can also enhance food security.

Additionally, the reduced need for fertilizers and pesticides lowers input and labour costs over time. The shade provided by agroforestry improves working conditions for farmers, making fieldwork less strenuous. In the long term, agroforestry increases the economic resilience of cocoa farmers. By maintaining soil health and supporting biodiversity, these systems ensure productivity over a longer lifespan compared to monoculture practices and allow for higher land utilisation, allowing for several crops being produced on the same land.

Challenges

The successful adoption of agroforestry practices in cocoa production requires system designs that account for local environmental and socio-economic conditions. Since no universal agroforestry system can meet all needs, designs must be adapted to the unique circumstances of each region.

Transitioning to agroforestry often involves significant up-front (financial) investments and technical know how. To address these barriers, it is essential to provide farmers with adequate tools, training, expert advice, access to financial resources, and high-quality planting materials. Additionally, creating markets for diversified products from agroforestry systems can further support farmers and encourage adoption.

Solutions

Given the significant environmental and socio-economic benefits of agroforestry systems in cocoa production, stakeholders along the cocoa supply chain have strong incentives to promote the practice as part of their sustainability commitments.

Governments in cocoa-producing countries can play a critical role by securing land tenure for farmers, creating an enabling environment for agroforestry adoption and security on tree ownership. Chocolate companies can contribute by offering financial incentives, investing in supply chain sustainability, and facilitating market access for agroforestry products. Civil society organisations (CSOs) and research institutions are uniquely positioned to provide technical expertise and build farmers' capacity through training and knowledge-sharing initiatives.

By working together, these stakeholders can ensure the successful implementation of agroforestry systems, benefiting both farmers and the environment.

Agroforestry systems have gained significant international attention in recent years for their potential to address pressing global challenges such as biodiversity conservation, climate change, food security, and sustainable development.

Agroforestry has been recognised as a contributing strategy to achieve several SGDs, particularly those related to Zero Hunger (SDG 2), Climate Action (SDG 13), Life on Land (SDG 15), and Responsible Production and Consumption (SDG 12). Under the Paris Agreement, agroforestry is widely acknowledged as a climate-smart agricultural practice, due to its critical role in carbon sequestration, enhancing climate resilience, and contributing to reforestation efforts.

Similarly, the UN Convention to Combat Desertification (UNCCD) endorses agroforestry within its Land Degradation Neutrality (LDN) framework for its ability to restore degraded lands and improve soil fertility. The World Bank also highlights agroforestry as a key component of its "climate-smart" village initiative. By integrating trees and shrubs into farming systems, agroforestry provides a sustainable approach to land management that benefits both the environment and local communities.

Agroforestry systems in cocoa production integrate non-cocoa tree species, including timber trees, with cocoa trees adapted to regional climatic conditions. These systems do not follow a single, universally applicable model but are customised based on local needs.

Cocoa farming particularly benefits from agroforestry because cocoa is an understory plant of riparian forests underlying a high dynamic, meaning it is able to develop in partial shade. The shade-providing trees included in agroforestry protect cocoa plants from excessive sunlight, reducing plant stress and yield loss. They help regulate the microclimate around cocoa plants by reducing temperature fluctuations and retaining humidity, and improve soil fertility through leaf litter, which adds organic matter and supports nutrient cycling.

Moreover, agroforestry systems are designed for long-term sustainability, making them ideal for a perennial crop like cocoa with its long lifespan. While cocoa yields in agroforestry systems tend to be lower than in conventional monocultures, total output – including timber, intercropped species, and ecosystem services – is typically higher, offering a balanced approach to long-term productivity and environmental stewardship.

While there is currently no universally agreed upon definition of agroforestry, the European Initiatives on Sustainable Cocoa (ISCOs) use the following classification of different levels of agroforestry, which can also be found in the SWISSCO MEL Framework.

Table 1: Levels of agroforestry, according to European ISCOs

Entry Level	Basic Level	Advanced Level
At least 16 non-cocoa trees/ha At least 3 different, preferably endemic tree species Corresponds to Cocoa & Forests Initiative (CFI) and World Cocoa Foundation (WCF) indicators on agroforestry	At least 40% canopy cover At least 5 different endemic tree species In accordance with Rainforest Alliance's shade coverage and species diversity reference parameters	At least 40% canopy cover At least 12 different endemic tree species (no pioneer species) At least 15% coverage by endemic vegetation Replica of the natural habitat for cocoa 2 strata or stories and shade providing species should reach a minimum height of 12-15 meters

Infobox: Dynamic Agroforestry

Traditional agroforestry integrates trees and crops into relatively static systems. In contrast, Dynamic Agroforestry (DAF) takes a more complex, evolving approach, inspired by the natural succession of forests. This method mimics ecological processes by encouraging the gradual replacement of one set of species with another over time. In DAF systems, crops and trees are categorised by their lifespan as pioneer, secondary, or primary species, all of which are planted simultaneously. Pioneer species, such as rice, manioc, or pigeon peas, grow quickly and provide initial food production. Over time, they give way to secondary species like pineapple and banana, as well as slower-growing tree species that thrive in their shade.

After 3-5 years, secondary species dominate the system, paving the way for the long-term development of primary species, which ultimately become the system's foundation.

Table 2: Development of a DAF system over a 30-year period

Type	Plants/ha		Notes
	Year 1	Year 30	
Cocoa trees	832	832	Grafted, certified species
Native timber trees	208	130	Species with long life cycles, at least 12 species from natural regeneration such as Terminalia and Nauclea
Biomass trees	832		Fast growing pioneering species such as Senna Acacia, Albizia, at least four species
Palm trees	72	72	Coconut and or oil palms, at least two species
Fruit trees	144	144	Citrus, mango, avocado, cola nuts and others
Cashew	832	30	For additional biomass production
Banana / Plantain	832		Common and popular local species to cover own needs and the local market
Biomass shrubs (seeds)	20kg		Bixa orellana, pigeon peas, at least two species
Leguminous plants (seeds)	72kg		Bush beans, Canavalia, cowpeas, peanuts
Manioc cuttings (rods)	625		For consumption and/or sale on the local market
Yam (seeds) optional	1600		For consumption and/or sale on the local market
Corn (seeds)	16kg		For consumption and/or sale on the local market
Vegetables (seeds)	120g		Aubergines, chilli peppers, tomatoes

Source: HALBA (2022)

This long-term process is essential for improving soil fertility, biodiversity, and overall ecosystem health. DAF promotes high biodiversity by incorporating a wide variety of plant species - trees, shrubs, herbs, and crops - that form a multi-layered canopy structure, closely resembling a natural forest.

Key features of DAF systems include:

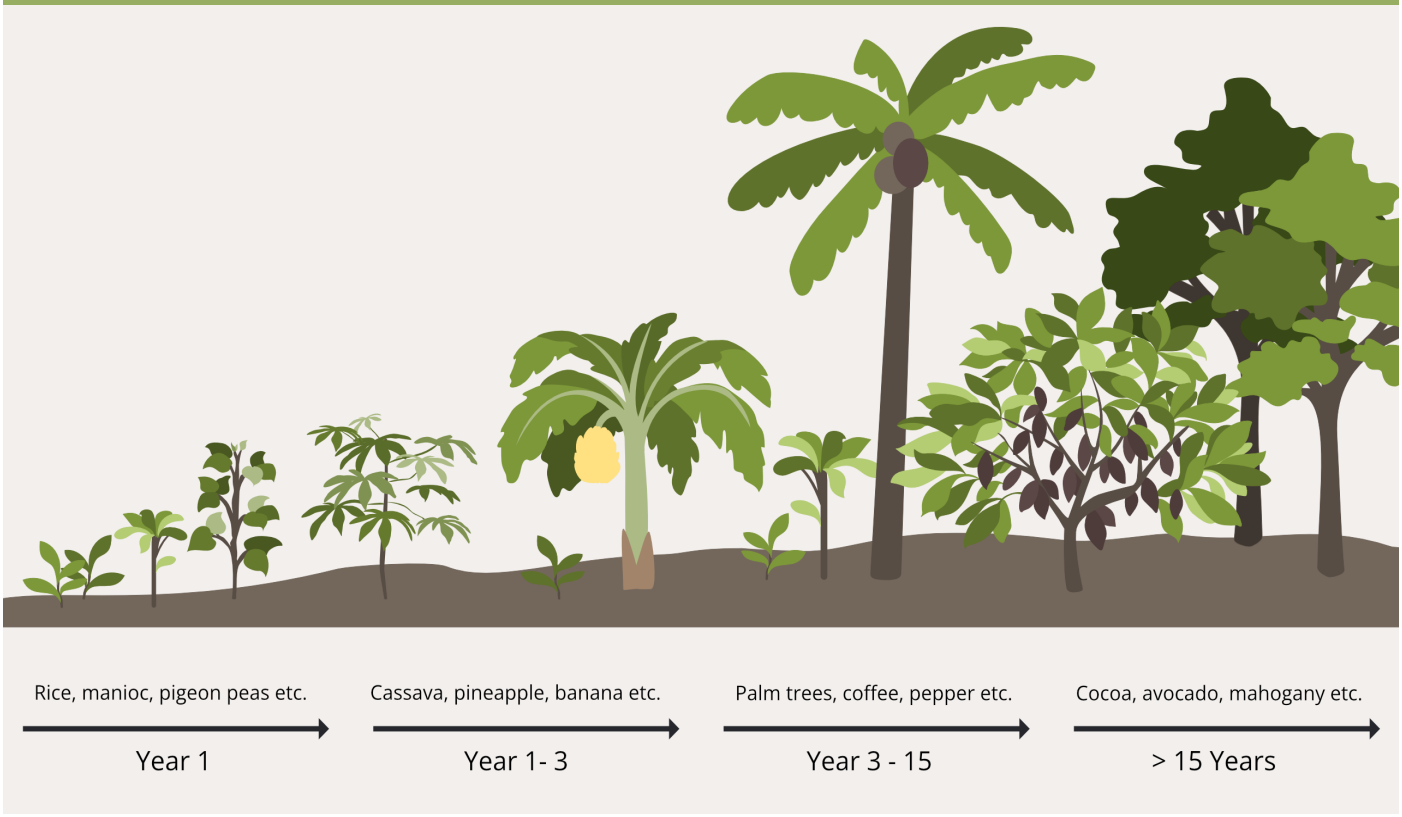
- **High planting density and diversity:** Species are stratified to form layered ecosystems with high energy flow, reducing reliance on external inputs.
- **Management practices:** Techniques such as pruning are used to regulate growth, increase biomass turnover and optimise productivity of the whole system.
- **Productive planting material:** Carefully selected plants ensure a balance between ecological benefits and farmer income.

By fostering self-sustaining systems that include nitrogen-fixing plants and natural ecological processes, DAF reduces the need for synthetic fertilizers and pesticides. However, it requires active management and regular adjustments as farmers guide the system through its stages of succession.

This makes DAF more knowledge-intensive than traditional agroforestry systems, as it demands a deeper understanding of ecological processes, plant interactions, and successional dynamics. For successful implementation, farmers need specialised training and experience over a longer time span.

Like all agroforestry practices, DAF is a long-term investment. Trees take time to grow, and the system's full benefits - improved soil health, greater biodiversity, and higher incomes - may take years to materialise. However, DAF systems typically generate income earlier than traditional agroforestry systems, as farmers can harvest staple crops from the first year, even while perennial crops like cocoa trees are still maturing.

Figure 1: Successional agroforestry



What are the potential benefits of agroforestry in cocoa?

Table 3 summarises the potential environmental, production, and socio-economic benefits of the implementation of agroforestry systems in the production of cocoa. They are described in detail below.

Table 3: Benefits of agroforestry in the production of cocoa

Environmental & Climate Benefits	Cocoa Production Benefits	Socio-economic Benefits
• Carbon sequestration • Increased soil fertility & reduced erosion • Air and water quality regulation • Wind blockage • Biodiversity and conservation	• Buffer against extreme weather events • Pest control and resilience to disease outbreaks • Can maintain cocoa production in short-term and increase overall in long-term	• Supports income diversification • Can reduce labour costs • Household consumption for enhanced food security

Environmental & Climate benefits

Carbon sequestration: Trees in cocoa agroforestry systems play a critical role in mitigating climate change by absorbing and storing carbon in their biomass. However, a recent study by Becker et al. (2024) reveals that shade tree cover across West Africa remains limited and poorly aligned with areas most vulnerable to climate threats. This highlights the significant untapped potential for carbon storage in agroforestry systems if their adoption is expanded and strategically implemented.

Increased soil fertility and reduced erosion: Trees in agroforestry systems enhance nutrient cycling by adding organic matter to the soil through leaf litter and root systems. This process enriches the soil with essential nutrients like nitrogen, phosphorus, and potassium, which are critical for cocoa growth.

Additionally, tree roots improve soil structure by reducing compaction and promoting water infiltration. They also play a vital role in preventing soil erosion, particularly on sloped terrains where cocoa is frequently cultivated, by stabilising the soil and reducing runoff.

Air and water quality regulation: Cocoa thrives under partial shade, and well-managed agroforestry systems create an optimal canopy cover to shield cocoa plants from excessive sunlight and heat. This stabilises the microclimate by reducing temperature extremes and protecting cocoa plants from heat stress.

In addition, the trees in agroforestry systems help retain soil moisture and increase humidity, particularly in areas prone to drought, making these systems more resilient than monocultures. The reduction in soil erosion and the natural filtration provided by tree roots improve water quality and protect watersheds, benefiting both local ecosystems and surrounding communities.

Biodiversity and conservation: Agroforestry fosters a diverse ecosystem that supports a wide range of wildlife, insects, and beneficial microorganisms often absent in monoculture cocoa farms. Shade trees and other plants provide critical habitats for birds, mammals and pollinators, contributing to biodiversity conservation in areas where natural forests have been lost. The more diverse structure of agroforestry plots help sustain species populations and enhance ecosystem health.

Cocoa production benefits

Stable short-term cocoa yields and increased long-term productivity: Agroforestry systems act as a buffer against extreme weather events such as heavy rains, windstorms and heatwaves, helping to stabilise cocoa yields in the short term The protective canopy provided by trees reduces the physical impact of wind and rain on cocoa plants, ensuring more consistent production.

Additionally, the biodiversity in agroforestry systems attracts beneficial insects and birds that serve as natural regulators of some cocoa pests, minimising the need for pesticides. Over the long term, agroforestry systems address soil degradation – a common issue in monoculture cocoa farms – by preserving soil health and maintaining biodiversity. This ensures sustainable productivity and enhances overall yields, making agroforestry a more resilient and ecologically sound approach to cocoa cultivation.

Socio-economic benefits

Enhanced Income Diversification: Agroforestry systems enable cocoa farmers to grow a wide range of crops and trees, including fruits like bananas and avocados, or timber, alongside cocoa. This diversification creates multiple income streams, reducing farmers' dependence on cocoa as their sole source of livelihood. As a result, they are better equipped to withstand fluctuations in cocoa prices, fostering economic stability and resilience.

Lower Labour and Production Costs: The natural ecosystem services provided by agroforestry systems – such as pest control, nutrient cycling, and improved soil health – can significantly reduce the need for synthetic fertilizers, pesticides and herbicides. These reduced input costs not only lighten the financial burden on farmers but also contribute to more sustainable farming practices. Additionally, the increased biodiversity in agroforestry systems facilitates the adoption of organic cocoa farming, which can fetch premium prices in international markets, further boosting farmers' profitability.

Increased Food Security: By integrating food crops such as bananas, plantains, and vegetables into cocoa agroforestry systems, farmers can enhance their household food security. This is particularly important in rural communities where access to food markets is often limited. The ability to grow consumable crops ensures a stable food supply for farming families, improving their overall well-being and resilience during challenging economic times.

Case Study: SysCom Bolivia

The SysCom Project in Bolivia, led by the Research Institute of Organic Agriculture (FiBL) and implemented in collaboration with ECOTOP, focuses on evaluating the performance of organic versus conventional cocoa cropping systems. Established in 2008/2009 in Alto Beni, the project conducts long-term experiments comparing monoculture (full sun) and agroforestry systems under both management practices. In addition, more complex successional agroforestry systems are studied.
Key areas of study include yield assessments, economic viability, ecological impacts, and the analysis of different cocoa cultivars. Additionally, participatory on-farm research aims to enhance organic agroforestry systems through community engagement and socio-economic studies.

Environmental Impacts

Early results from the project indicate that agroforestry systems under both organic and conventional management perform similarly, with shade management playing a critical role in yield optimisation. When looking at the environmental impact of the different cocoa cropping systems evaluated, it was found that monocultures, especially conventional ones, have higher environmental impacts per hectare across all measured categories, such as global warming potential and eutrophication. Per kilogram of cocoa produced, **agroforestry systems generally have lower environmental impacts than monocultures**.

Moreover, **agroforestry systems were found to store 2-3 times more carbon (ca. 5/t/year) than monocultures**. When emissions and carbon capture are balanced, agroforestry systems show a more favourable carbon cycle compared to monocultures, supporting climate mitigation efforts. Successional agroforestry systems are especially beneficial, as they have shown to have the highest carbon capture potential. The project findings also confirm that **agroforestry systems buffer higher temperatures effectively**, providing a climate adaptation benefit, though they may not protect against cold spells.

Total Yields

Moreover, **agroforestry systems were found to deliver 2-4 times more food or energy equivalents compared to monocultures,** contributing significantly to long-term food security. While the project found no significant differences in cumulative income between the different systems observed, it did find that conventional agroforestry systems performed slightly better economically.

A system comparison trial between the cocoa practices commonly used in Ghana and DAF was set up at the Cocoa Research Institute of Ghana (CRIG) in 2022. The initial results, which were very promising for the DAF approach, were presented during a workshop at CRIG at the end of 2024.

Best practices for successful adoption of agroforestry in cocoa

The active participation of farmers in the design of agroforestry systems is crucial to ensure their success in the long term. Only when the systems put in place are adapted to the farmers' capabilities, motivation and means, the farmers' continued commitment and the systems' success can be ensured.

Capacity building and technical support

Addressing the Complexity of Agroforestry

Agroforestry systems are inherently more complex than monoculture systems, requiring farmers to manage a variety of species, including shade trees, fruit trees, and cacao. Each species has unique maintenance needs, demanding a higher level of knowledge and management skills.

For instance, shade trees must be regularly pruned during the early stages to prevent excessive shading of cocoa plants, a practice that can be labour-intensive and time-consuming. In some countries, shade regulation is achieved through tree debarking, but pruning remains a costly and challenging task. A bottleneck for farmers is the use of adequate tools such as pole saws, pruning shears, and good quality hand saws. Further research is needed to optimise pruning techniques and understand the agronomic, ecological, and economic conditions under which pruning is most effective.

Moreover, pest and disease management in agroforestry systems can be more complicated than in monocultures due to the presence of diverse species. Farmers may find it harder to monitor and control specific pests, and pesticide use may differ from their use in conventional production systems. To overcome these challenges, farmers adopting agroforestry require specialised training to manage diverse species, implement successional planting, and balance shade cover effectively.

Overcoming Barriers to Adoption

Without a clear understanding of the benefits and practices of agroforestry systems, farmers may hesitate to adopt these systems, fearing reduced yields, increased labour demands, and short-term risks. The transition from monoculture to agroforestry is often a bottleneck due to the economic risks perceived, even though long-term yields may be higher. To bridge this gap, capacity building and knowledge sharing are critical. Moreover, without the right tools, it is impossible to manage cocoa plantations properly. This applies to both common practice and, to an even greater extent, agroforestry systems.

Effective communication, tailored to farmers' needs and capabilities, plays a key role in promoting agroforestry adoption. Peer-to-peer learning through cooperative groups and mentoring programmes has proven particularly effective. Farmers often trust advice from peers who have firsthand experience with agroforestry.

Complementary approaches such as on-the-ground workshops and field-based training sessions, can provide hands-on guidance on specific agroforestry techniques. Demonstration plots that showcase successful agroforestry systems are also invaluable as they allow farmers to witness the benefits in practice.

Continuous support from agroforestry specialists is essential, particularly during the transition phase. Specialists can visit farms, offer tailored advice, and help farmers address challenges as they arise, ensuring a smoother shift to agroforestry practices.

Managing Expectations and Cultural Shifts

Transitioning to agroforestry requires a significant cultural shift for many farmers, particularly those accustomed to monoculture systems. It is vital to acknowledge the risks involved and manage expectations, as the uncertainty of change can understandably make farmers risk averse. Clear communication about the potential challenges and long-term benefits of agroforestry, coupled with sustained support, can help build trust and confidence in the transition phase.

Land Tenure

Secure land tenure and tree ownership are critical to encourage cocoa farmers to invest in agroforestry, which is a long-term investment. Without secure, long-term ownership or use rights, farmers are hesitant to adopt agroforestry because they fear losing access to the land before they can reap the full benefits. In regions where land grabbing or conflicts are common, lack of legal guarantees increases farmers' concerns about eviction or displacement.

In many cocoa-growing regions, land is governed by customary or communal land tenure systems, where land is allocated according to traditional practices instead of formal legal ownership. These systems often lack clear documentation or legal recognition, making it difficult for farmers to prove their rights to the land.

In communal systems, decisions about land use are often made collectively, which can complicate the adoption of agroforestry, as individual farmers may not have the autonomy to manage their land independently. Moreover, land is often passed down through generations within families, and the absence of formal documentation can lead to disputes over ownership and use rights.

Many cocoa farmers do not own the land they cultivate but instead operate under lease agreements or sharecropping arrangements, especially migrant farmers from neighbouring regions or countries. Migrant farmers are often granted use rights in exchange for payments or a share of the cocoa harvest.

These arrangements are typically short-term and offer little legal protection, leaving farmers vulnerable to eviction or sudden renegotiation of terms. As a result, farmers are often reluctant or unable to invest in agroforestry, which requires a long-term commitment.

Additionally, tenant farmers or sharecroppers may not have the authority to change land use practices or plant trees without the landowner's approval. Landowners, particularly those seeking immediate profits from monoculture cocoa production, may prioritise short-term gains over the slower, long-term benefits of agroforestry.

Women, who play a key role in cocoa farming, face even more challenges in accessing land and land tenure rights. Customary land tenure systems and laws that favour male inheritance often prevent women from owning and controlling land, limiting their ability to adopt agroforestry practices and improve their livelihoods.

The colonial legacy also continues to affect land tenure systems today. In many regions, formal land ownership remains limited, and rural farms often operate under customary arrangements that lack legal recognition.

To support the adoption of agroforestry, governments in cocoa-producing countries must focus on securing land rights. This can be achieved through the formalisation of land ownership or long-term use rights, providing farmers with the legal security they need to invest in sustainable farming practices.

Reforming land tenure systems could include issuing land titles, recognising customary land rights, and creating accessible, affordable systems for land registration. Sensitising farmers on the importance of documenting their farm and land tenure arrangements Is also crucial. By supporting these reforms, governments can support agroforestry and ensure a more sustainable future for cocoa production.

Adaptation to local conditions

Adapting cocoa agroforestry systems to local conditions, is crucial for maximising their effectiveness and sustainability. Each cocoa-growing region presents unique environmental factors – such as soil, climate, biodiversity, and social conditions- that necessitate tailored approaches. Adjusting agroforestry systems to these specifics results in higher yields, greater resilience to climate challenges, and improved farmer livelihoods.

Conducting a comprehensive assessment of local factors, including soil type, water availability, and microclimatic conditions, ensures that cocoa and companion crops are well-suited for the environment. Incorporating native tree species further enhances resilience against local pests, diseases, and environmental stressors.

Engaging with local farmers and communities during the design and implementation of agroforestry systems is essential. By incorporating their knowledge and addressing their needs, farmers are more likely to embrace and sustain these systems in the long term.

Additionally, many farmers rely on diverse income streams to mitigate the risks of depending on cocoa. Establishing access to markets for both cocoa and agroforestry products can provide supplementary income and increase financial stability. In regions facing food insecurity or malnutrition, agroforestry systems offer further benefits by integrating food crops. Growing staple foods alongside cash crops can ensure a stable food supply for farming families while supporting their participation in commercial agriculture.

Case Study: Sankofa

The Sankofa 2.0 Project[1], supported by SWISSCO and implemented by HALBA, aims to contribute to income diversification, climate resilience, food security and biodiversity conservation in the communities of Goaso, Bibiani, Kasapin, Kukuom and Sankore in Ghana.

The main objective is to enable 3,500 farming households to implement dynamic agroforestry systems across 1,100 hectares. Farmers are trained on sustainable agroforestry techniques, including tree planting, management of organic matter, selective weeding, tree pruning, and management of associated crops.

Focus group discussions held in March 2024 among 45 participating farmers in Bibiani and Goaso have shown that the **majority of farmers agreed that the level of income has increased and become more stable** since participating in the project. Where income has stayed neutral, this was attributed to the need to hire labourers due to increased workload. It is to be noted that in these discussions only the income of two associated crops was taken into account and that the majority of DAF plots in question have not yet reached maturity and farmers are not yet able to reap their full benefits.

Crops that are not consumed by the local population and therefore lack in demand and market options, such as oranges, are bought and exported by the Kuapa Kokoo cooperative thanks to the Sankofa project, which is particularly appreciated by participants.

While **all farmers noted an improvement in their education** level since participating in the project in terms of training and knowledge, they emphasised that **more training is still needed**.

An often overlooked, yet important effect is **improved health thanks to the reduced need for pesticides**. Farmers reported fewer body pains and headache, reduced tiredness, improved eyesight, and decreased waist pains that had been caused by the use of spraying machines.

Further information on HALBA's approach to dynamic agroforestry can be found here.

1 The project „Sankofa 2.0" is funded and supported by Coop and HALBA, the Swiss State Secretariat for Economic Affairs (SECO) through the Swiss Platform for Sustainable Cocoa's Landscape Programme, the Finnish Ministry of Foreign Affairs (MFA) through Fairtrade Finland, Fairtrade Max Havelaar Switzerland and NTF V through the International Trade Centre (ITC). It is implemented by Fairtrade Africa (FTA), Kuapa Kokoo Cooperative Cocoa Farmers and Marketing Union Limited (KKFU), International Trade Centre (ITC) and Nature and Development Foundation (NDF). Technical support to the project is provided by Ecotop Suisse GmbH and the Cocoa Research Institute of Ghana (CRIG).

Financial incentives for farmers

Agroforestry systems require higher initial investments compared to conventional farming, as farmers must purchase adequate tools and plant diverse tree species alongside cocoa. These costs include seeds, saplings, labour, and, in some cases, infrastructure. For smallholder farmers, such upfront expenses can pose a significant barrier.

To make agroforestry more attractive and accessible, various financial incentives can be employed.

Payment for Ecosystem Services (PES)

Agroforestry provides valuable ecosystem services such as carbon sequestration, biodiversity conservation, and watershed protection. PES schemes compensate farmers for these contributions, offering financial rewards for maintaining trees, enhancing soil health, and protecting local ecosystems. Governments can establish frameworks for PES programmes, such as Peru's MERESE initiative, to encourage investment in environmental services.

The Science-Based Targets initiative (SBTi) provides a framework for companies to set science-based targets to reduce greenhouse gas (GHG) emissions. Cocoa companies committed to SBTi can also use PES as a tool to meet their SBTi-aligned climate targets. These schemes align with efforts to eliminate deforestation and promote sustainable land use, making PES and effective means for businesses to achieve their emissions reduction targets.

Carbon markets offer additional opportunities. Farmers can sell carbon credits through certification programmes like Verra (VCS) or Gold Standard, earning supplementary income for the carbon stored by trees in their agroforestry systems. These payments can take the form of direct revenue or in-kind contributions such as planting material or training, further supporting long-term sustainability of agroforestry.

The REDD+ framework, established under the UNFCCC, also promotes agroforestry as a method to reduce deforestation and enhance carbon sequestration. By participating in REDD+, countries and communities can benefit from financial incentives that prioritise both environmental conservation and local economic development.

For an in-depth look at climate finance opportunities in sustainable cocoa production, see SWISSCO's Climate-smart agriculture and agroforestry Guidance Document.

Premium Prices through Certification

Sustainably produced cocoa from agroforestry systems doesn't automatically command a premium price unless it is certified organic or part of a recognised sustainability programme. Certification systems like Rainforest Alliance or Fairtrade allow cocoa farmers to sell their produce at higher prices, rewarding sustainable practices and enhancing profitability.

Grants and Soft Loans

Non-governmental organisations (NGOs) and development agencies often provide grants to offset the costs of transitioning to agroforestry. Similarly, microloans or soft loans - with favourable terms such as low interest rates or deferred payments - are available to help farmers adopt agroforestry practices. These financial tools lower entry barriers, enabling farmers to make the shift without overextending their resources.

Market Challenges and Opportunities

Agroforestry systems often include additional crops such as fruit, timber, or other non-cocoa products. However, poorly developed markets and supply chains for these products limit their financial viability. Without reliable buyers or established markets, farmers may hesitate to diversify their crops.

To address this, cooperatives and farmer associations can help farmers to collectively market and sell non-cocoa products, increasing their bargaining power and improving market access. Additionally, identifying economically viable by-products that grow well under shade and align with existing consumer demand can further enhance agroforestry's profitability.

While a lack of access to markets for non-cocoa crops cultivated in agroforestry systems currently persist in many contexts, key stakeholders along the cocoa supply chain can play a critical role in overcoming these challenges:

- **Companies** can integrate non-cocoa agroforestry products into their supply chain by purchasing by-products directly from farmers.
- **Governments and development partners** can invest in infrastructure such transportation, storage and processing facilities to support farmers to efficiently bring non-cocoa products to markets.

By addressing market limitations and promoting integrated solutions, stakeholder can ensure that agroforestry becomes both economically viable and widely adopted.