Touton and Agro Eco: Promoting cocoa agroforestry in Ghana

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Between 2017 and 2020 Touton and Agro Eco collaborated to promote agroforestry in Bia and Juaboso districts in the Western North Region of Ghana, under the Partnership for Productivity Protection and Resilience in Cocoa Landscapes (3PRCL) project. The Juaboso-Bia landscape is a major cocoa-producing area, and it is one of the Hotspot Intervention Areas under Ghana's Cocoa Forest REDD+ Programme. The 3PRCL project is implemented together with the Ghana Cocoa Board (COCOBOD), the Ghana Forestry Commission, the Nature Conservation Research Centre, Tropenbos Ghana and SNV-Netherlands Development Organisation. The project aims to achieve a deforestation-free cocoa landscape in Juaboso-Bia, develop a landscape-wide governance framework for land-use management, and support the development of a market for climate-smart cocoa beans.

Touton and Agro Eco began working together on agroforestry after signing a memorandum of understanding in October 2017. In 2019, they planted 80,000 timber trees, covering an area of 1,000 hectares of cocoa plantations. And as part of the project, 13,640 smallholder farmers were trained in good agricultural practices, and 4,385 of them adopted the Climate Smart Cocoa Standard.

Based on the success of this agroforestry strategy, Touton is planning to scale out this work to other areas, such as Asunafo-Asutifi and Kakum landscapes in Ghana's Ahafo and Central regions; initial engagements started in early 2023 and a baseline survey is ongoing.

What is agroforestry and why is it important for Touton?

Touton considers that promoting agroforestry is important for the sustainability of its supply chain by improving ecological resilience in cocoa plantations. Agroforestry provides important economic benefits for the farmer, such as diversification of farm income, and the improved yields that are expected from adoption of good agricultural practices and from the shade, shelter and nutrient cycling provided by the planted trees as they mature. In addition, Touton acknowledges the specific climate mitigation benefits of tree planting, especially since the landscape is part of Ghana's Cocoa Forest REDD+ programme.

This company case report is an annex to the report "Promoting cocoa agroforestry in West Africa: Experiences from the private sector and opportunities for collaborative action" by Tropenbos International, Tropenbos Ghana and Nitidae.

In Juaboso-Bia, Touton follows the Timber in Cocoa Agroforestry (TiCA) model, which was developed by Agro Eco. In this model, timber trees are planted at a density of 80 seedlings per hectare, in 10 m by 10 m square spacing or 12 m by 10 m triangular spacing patterns. In addition, fruit, medicinal and other multipurpose trees can be planted along plot boundaries, paths or waterways. Timber trees are sold after 20 to 30 years and new timber seedlings are planted, to guaranteed the continuation of the production cycle, and the surrounding cocoa is rehabilitated. The TiCA model foresees that investors, such as timber companies, could co-invest in the planting of timber trees, and their costs would be repaid then the trees are harvested. However, in the project that is described here, this set-up was not used. Instead, all the costs of TiCA establishment were covered by Touton.

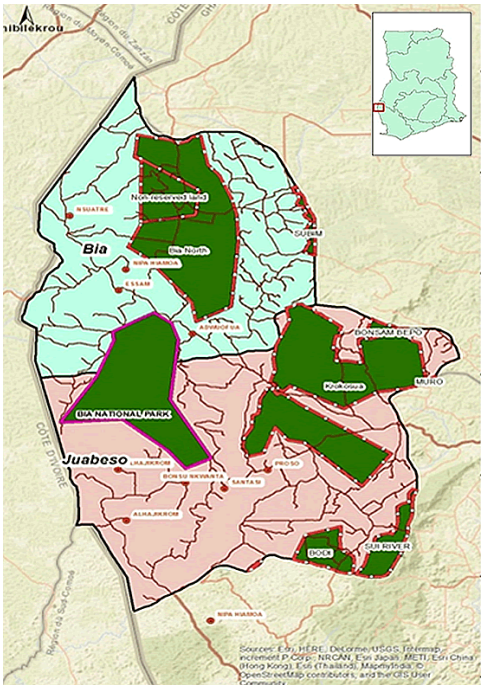

Figure 1. Map of the Juaboso Bia landscape in western Ghana

Touton's strategy for promoting agroforestry, in collaboration with Agro Eco

Promoting agroforestry at farm level

At the start, participating farmers are registered as being part of the programme, following consultation and community sensitization by Community Resource Management Areas (CREMAs). They also receive training in good agricultural practices (GAPs), including agroforestry; in addition, seedlings are provided and planted by youth teams, and communities are encouraged to establish village nurseries. Six cocoa agroforestry demonstration plots were also established as part of the 3PRCL project. These were used in training courses to show farmers the ideal model of 80 trees per hectare, and to introduce them to good agricultural practices.

One year after planting, Agro Eco and Meridia registered the trees and registration was verified and validated by the Forest Service Division of the Forestry Commission. Some farmers without land title also asked Meridia for support to obtain documentation at the same time as they had their trees registered. Together, Touton and Agro Eco have also trained youth teams in the landscape, who can support farmers in planting seedlings and who can take care of stem pruning and shade management and other farm management practices if needed.

Touton and Agro Eco developed a monitoring guide for Touton field agents, to assesses how trees are growing, measuring indicators such as access to light and pruning practices, in addition to survival rates.

Besides technical training in agroforestry and GAPs, Touton and Agro Eco also provided training in financial management practices, and established village savings and loan associations. Financial training included the importance of savings, investments, how to grow/manage farming businesses, organizational management, and how to borrow, repay and share profits at the end of a savings cycle. Touton was also one of the first companies (with Mars) to use the FarmGrow app. This mobile decision-making app for farmers combines agronomy and economics, building on the farm development plans (FDPs) that support agri-business planning and monitoring for cocoa farmers.

A landscape level approach

Touton and Agro Eco also work at the landscape level, and that complements the farm-level promotion of agroforestry. Community consultations on landscape issues were successfully piloted, raising the awareness of local people about the interactions between human activities and environmental impact.

At the landscape level, in addition to promoting agroforestry, the consortium in the Juaboso Bia landscape (which both Touton and Agro Eco are part of) supported the formation of community governance groups, building on the CREMAs that were already in place. Touton supported these groups in the reforestation of forest reserves by providing seedlings, and by supporting farmers who are already protecting forests to continue their efforts and to do more.

To guarantee that there was no further conversion of any forest land as defined under national regulations, and using High Carbon Stock and High Conservation Value methodologies, risk assessments were undertaken on 28,446 hectares in all sourcing areas, and 18,888 farms were mapped to ensure that cocoa is not being sourced from forest land.

Key lessons and challenges

Costs are a barrier to scaling up tree registration: It was not possible for Touton and Agro Eco to undertake tree registration at a large scale due to cost limitations. However, increasing support has been provided by the Forestry Commission, who are also providing seedlings for infilling as well as verifying and validating the trees planted.

Establishing local governance structures takes time: In the Juaboso-Bia landscape, the consortium worked on this together, and by working with communities, it was clear that understanding the needs and concerns of all people in the landscape was crucial to identifying where Touton could contribute most effectively. In new landscapes, without such partnerships, Touton may not be able to undertake this alone.

Farmers' willingness to plant trees in their cocoa farms remains low: This is primarily because of a fear of timber companies coming to cut down their trees with a licence from the Forestry Commission, which used to occur. Tree registration is therefore a key part of the strategy, to give the farmers legal ownership of the timber trees that they plant. Farmers are also concerned about the possible impacts of shade trees on increasing the incidence of black pod and other diseases. In fact, the risk of disease is much reduced by applying good agricultural practices, which was shown during farmer training.

Farmers are concerned about the impact of timber harvesting: The initial set-up of the TiCA model included periodic thinning, where timber trees would be thinned and replanted at periodic intervals to provide income to the farmers while ensuring the right level of shade for cocoa. This approach could provide an earlier and more regular source of income, compared to models which depend on fully matured timber, while also ensuring that the shade level never exceeds 40%, as recommended by COCOBOD. However, farmers were concerned about the impact of the timber-harvesting activities on their cocoa farms. Therefore, the project opted for longer cycles (20 to 30

years). Moreover, it turned out to be difficult to sell the smaller logs, which were initially targeted for electricity poles. However, electricity poles in Ghana are generally made of teak, which is not recommended for integration in a cocoa agroforestry system.

Engagement with timber companies is difficult: Although the TiCA model could be implemented with co-investment from timber companies, the short-term nature of projects and the relatively small scale (1,000 ha) makes it difficult to engage timber companies.

A better understanding of suitable tree species and incentives is needed: Which trees are available, in both professional and in community nurseries? Which fruit trees are compatible with cocoa and desirable for the farmer? What are suitable incentives for the farmers to maintain the trees? What are options for payments for ecosystem services: in cash, in kind (e.g. ,borehole, cookstoves, investing in community infrastructure, etc.); and what is the potential of carbon and biodiversity payments?

Lack of tree tenure remains an important barrier: It is necessary for tree registration to be rolled out in Ghana, with an accurate database of planted and nurtured trees. Natural occurring trees from 2010 on should be seen as nurtured trees. At that time certification started asking for 18 trees per hectare, which encouraged farmers to nurture the naturally occurring trees on their farms. Moreover, this more secure tenure should lead to no more harvesting of trees in cocoa farms by lumber companies (licenced by the Forest Commission).

Next steps

Sustaining the rates of farmer adoption of cocoa agroforestry is of course critical, in order to achieve impacts at scale. To this end, in 2019 Touton partnered with CIRAD to study the most efficient agroforestry systems in West Africa with the aim of selecting models to pilot with partner farmers. In parallel, Touton began working with civil society partners on joint financing mechanisms to sustainably support landscape activities into the future.

Figure 2. Cocoa farmers in Aowin Municipal District with timber trees on their farm