IDH LANDSCAPE CASE STUDY SERIES

The Business Case for Engaging in Landscape Approaches





TOUTON:

The business case for a landscape approach to sustainable cocoa production in Ghana

Landscape: Bia-Juabeso Districts, Western Ghana

Company Sector: Cocoa trading Net Revenue: USD 1.18 billion

"Cocoa production and sustainable forest management are closely linked, and strongly influence each other. The challenge is now to turn the vicious cycle of environmental degradation and low productivity into a virtuous one of sound environmental management and highly productive systems. The challenge is great. As is Touton's commitment to contribute to addressing it."

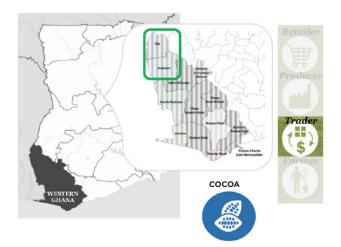
Patrick de Boussac, CEO, Touton

Key Business Motivations:

Address operational and climate change risks, secure long-term supply, increase product offering

Landscape Maturity Level:

Effective implementation



ProduceClimate-Smart
Cocoa production

Forest protection

Include
Increase yields and
diversify livelihoods
for farmers

Summary

Declining production due to the impacts of climate change on ageing cocoa fields in Ghana has driven trading company Touton to engage in a landscape approach in the Bia West and Juabeso districts in Western Ghana. The approach sees Touton working closely with Ghana's Cocoa Board and other government bodies to establish a landscape forest governance framework, find solutions to land tenure challenges and develop a Climate-Smart Cocoa (CSC) standard. The company intends to report to its partners on sustainability outcomes at the landscape scale using the standard in the coming years, while simultaneously contributing to the government's efforts to meet its REDD+ commitments. The approach seeks to mitigate risks regarding future supply and provides a platform to work in partnership with the government for a 'winwin' solution.























Glossary

COCOBOD - Ghana Cocoa Board

Climate-Smart Agriculture – Agriculture that sustainably increases productivity, enhances resilience (adaptation), reduces/removes GHGs (mitigation) where possible, and enhances achievement of national food security and development goals¹.

Cocoa Processing Company (CPC) – Ghanaian company that processes raw cocoa beans into semi-finished products and finished products.

Climate-Smart Cocoa (CSC) – production approach designed to enhance the capacity of the cocoa production system to support food security, incorporating the need for adaptation and the potential for climate change mitigation into sustainable agriculture development strategies.

Cocoa Marketing Company (CMC) - wholly-owned subsidiary of COCOBOD with the role of marketing and exporting Ghana's cocoa beans to local and foreign buyers and traders.

GCFRP - Ghana Cocoa Forest REDD+ Program².

Hotspot Intervention Areas (HIAs) – Priority areas for immediate and concentrated interventions at the farm to landscape level under the GCFRP.

Licensed Buying Companies (LBCs) – private companies licensed by COCOBOD to purchase cocoa on its behalf for a fee.

Rural Service Centres (RSCs) - centres established by Touton and that provide comprehensive training and services for the professionalization of farmers.

REDD+ - countries' efforts to Reduce Emission from Deforestation and Forest Degradation and foster conservation, sustainable management of forests and enhancement of forest carbon stocks³.

Shade trees – any tree grown specifically for its shade. Cocoa is produced in traditional shaded cocoa agroforests, where cocoa trees grow under the shade provided by native and introduced forest and fruit trees.

³ http://www.un-redd.org/



¹ http://www.fao.org/climatechange/epic/activities/what-is-climate-smart-agriculture/en/#.WsybmojwY2w

² https://www.forestcarbonpartnership.org/sites/fcp/files/2017/ June/1b.%20Ghana%20overview.pdf

Background

Touton Group

Touton Group is a global commodity trader engaged in the trading of cocoa, coffee, vanilla and natural ingredients into European, American and Asian markets. First established as Maison Touton in 1848, the privately-owned company is headquartered in Bordeaux, France and has 15 offices worldwide, employing over 900 people. Touton has long been a major player in the global trade of cocoa, buying and selling around 10% of the world's cocoa each year⁴. Cocoa accounts for approximately 60% of the company's revenues, and it trades around 400,000 MT of cocoa bean equivalents annually⁵. Touton sources its largest volumes of cocoa from Côte d'Ivoire and Ghana and purchases smaller volumes from Nigeria and Cameroon.

Touton is one of the top five cocoa bean buyers in Ghana. The company trades about 100,000 MT of ordinary cocoa each year through the Ghana Cocoa Board (CO-COBOD). In addition to sourcing cocoa beans and cocoa derivatives directly for export, in 2015 the company took over a grinding factory in Tema, previously belonging to Niche Cocoa Industry. The facility, now Cocoa Touton Processing Company (CTPC), was the result of a EUR 17 million investment and provides 30,000 MT of processing capacity⁶. At the same time the company also signed a tolling agreement for cocoa butter, cake and powder with the Cocoa Processing Company (CPC) - formally government run factories, now partially privatized. This agreement expanded the company's grinding capacity by 40,000 MT. In 2015 the company also opened its first Rural Service Centres (RSCs) in Ghana which provide comprehensive training and services for the professionalization of farmers.



- 4 https://translate.google.co.uk/translate?hl=en&sl=fr&u=http://www.sudouest.fr/2010/05/06/le-negociant-en-cacao-bordelais-touton-se-diversifie-84332-730.php&prev=search
- 5 https://www.confectionerynews.com/Article/2017/10/30/Touton-teams-with-Cocobod-to-tackle-forest-devastation-in-Ghana
- 6 https://touton.fr/images/resources/QuickFacts/20170420-QuickFactsTouton-Ghanaoperations.pdf

Cocoa driving growth in Ghana

Ghana is the second largest producer of Cocoa in the world, producing over 800,000 MT annually, second only to its neighbour Côte d'Ivoire. Cocoa is the country's second largest export (estimated at USD 1.89 billion⁷). According to the Bank of Ghana, the cocoa sector accounts for more than 9% of Gross Domestic Product (GDP)⁸. The crop is a major source of income for approximately 800,000 farmers in the country, with three quarters of cocoa production coming from smallholder farmers. Cocoa production in Ghana is focused in the High Forested Zones that stretch across the country's south coast, where rainfall is high and climatic conditions ideal for cocoa production.

Ghana has a unique supply chain model centred on strong government control, with COCOBOD overseeing nearly all aspects of the supply chain. Previously, all cocoa purchases were made through COCOBOD's subsidiary, Produce Buying Company. In the early 1990s, the Ghanaian government introduced a series of reforms, notably in respect to the internal marketing of cocoa. Nowadays, an estimated 48 Licensed Buying Companies (LBC) operate in Ghana. As long as LBCs meet the government's high-quality standards, these private companies can purchase cocoa from farmers on behalf of COCOBOD for a fee and then export. COCOBOD prides itself on strict quality standards and conducts quality checks at three levels (at District Depot, on arrival at the port, and prior to shipment) before cocoa is exported. The quality of Ghana's cocoa bean is world renowned and exceeds many international standards. Cocoa Marketing Company (CMC) is a wholly-owned subsidiary of COCO-BOD and has the role of marketing and exporting Ghana's cocoa beans to local and foreign buyers and traders.

Challenges to production

Low productivity is a problem across West Africa, and Ghana has one of the lowest yields per hectare (ha) of cocoa in the world (approximately 400-450kg per ha⁹). Traditionally, cocoa farmers have lacked access to high yielding planting material, agro-pesticides and fertilizers, technical production training and, crucially, finance¹⁰. Another reason for the low average yield in Ghana is the high average age of the cocoa fields, which means they are less productive. It is also a concern that the effects of climate change will further impact the quality and volume

- 7 https://atlas.media.mit.edu/en/profile/country/gha/
- 8 https://www.agriskmanagementforum.org/sites/agriskmanagementforum.org/files/Documents/Ghana%20Cocoa%20SCRA%20Report%20 2011%20ARMT.pdf
- 9 https://www.ft.com/content/8218c-bc-5dc8-11e3-95bd-00144feab-
- 10 https://www.ghanaweb.com/GhanaHomePage/NewsArchive/Life-line-for-cocoa-industry-as-Touton-S-A-partners-gov-t-416463



of crop produced, as vast areas of Ghana and Côte d'Ivoire are predicted to become less suitable for cocoa production as global temperatures climb by up to 2°C by 2050¹¹. Ghana is particularly vulnerable to this due to its older tree stocks (23% of cocoa tree stock are more than 30 years old)¹², limited shade tree use, notably as a result of opting in some areas for zero shade cocoa production systems due to its higher short-term yields. Farmers are often solely dependent on cocoa for income and so suffer most acutely in the face of changing market and environmental conditions.

Cocoa as one of the drivers of deforestation

Cocoa trees grow well in humid tropical climates with regular rains and a short dry season. Most of the world's cocoa is grown in a narrow belt ten degrees either side of the Equator typically home to tropical forests. Between 1990 and 2005, Ghana lost 26% of its forest cover, primarily driven by agricultural expansion¹². It is estimated that since 2010 deforestation rates have increased from approximately 2.1% per year to 3.2% per year¹³. There are 214 forest reserves in Ghana, which are designated for the production of timber and have good infrastructure and accessibility. As a result, communities use the roads established and farm in the reserves. The forest reserves, despite being protected, are now considered to be 'partly to mostly degraded'14. Deforestation has led to degradation of soils, water insecurity, shifts in rainfall, crop failures due to droughts and loss of soil fertility and biodiversity in the region. The compounding effect of deforestation leading to low productivity creates a need for more expansion into forests to fill productivity gaps.

Multiple land ownership frameworks are also part of this challenge. Approximately 20% of land in Ghana is owned by the State, and is governed by statutory law. Approximately 80% is governed through customary tenure arrangements and via chiefs or other customary authorities¹⁵. The law in Ghana states that the Forestry Commission has management rights over all forest reserves and protected areas, however, in reality, community members feel that the land (including reserves) belongs to them due to precedents around tree tenure. Traditional tree tenure holds that non-timber trees planted on communal lands are the property of the communal body or 'stools' who must be informed of any management decisions made by the land user¹⁶.

With cocoa trees, it is generally recognized that while the land belongs to communities, the planter maintains ownership and use rights over the tree as long as it is producing fruits. This means that the original tree planter must secure the consent of the landowner before replanting or cutting down these trees. This often acts as a disincentive for replanting when trees are old, and for rehabilitating diseased trees¹⁷. This also leads to farmers often preferring to clear new land rather than replant, as they see it as easier to open new areas compared to renegotiating new agreements with the landlords.



Buyers of cocoa are increasingly aware of how forests shape local climatic conditions and are recognizing deforestation as a material business risk. In March 2017, twelve of the world's leading cocoa and chocolate companies committed to ending deforestation in the global cocoa supply chain via the Cocoa and Forests Initiative statement of intent¹⁸. These companies include Barry Callebaut; Blommer Chocolate Company; Cargill; CE-MOI; ECOM; Ferrero; The Hershey Company; Mars Incorporated; Mondelēz International; Nestlé; Olam and Touton. The initiative is facilitated by the Sustainable Trade Initiative (IDH), the World Cocoa Foundation (WCF) and the International Sustainability Unit of the Prince of Wales (ISU). More than 30 companies from the cocoa and chocolate sector are now committed to this effort. In November 2017, this commitment was translated into a Framework for Action signed by the Ghana government and cocoa companies. Implementing the Framework will require government, business and CSOs to collaborate at national, regional and district levels.

- 11 https://cgspace.cgiar.org/bitstream/handle/10568/51470/Climate%20suitability%20for%20Cocoa%20farming.pdf
- 12 https://rainforests.mongabay.com/deforestation/archive/Ghana.htm
- 13 https://www.forestcarbonpartnership.org/sites/fcp/files/2017/June/ GCFRP_Carbon%20Fund_Final%20Draft_April%2022%202017-formatted.pdf
- 14 https://theredddesk.org/countries/ghana/statistics
- 15 https://www.land-links.org/wp-content/uploads/2016/09/USAID_ Land_Tenure_Ghana_Cocoa_Report.pdf
- 16 https://www.land-links.org/wp-content/uploads/2016/09/USAID_ Land_Tenure_Ghana_Cocoa_Report.pdf
- 17 https://www.land-links.org/wp-content/uploads/2016/09/USAID_ Land_Tenure_Ghana_Cocoa_Report.pdf
- 18 http://www.sustainablebrands.com/news_and_views/organizational_change/sustainable_brands/cargill_nestlé_mars_join_forces_combat_defor

In trying to respond to the demand for deforestationfree cocoa in Ghana, challenges exist around how farms developed inside forest reserves are handled. Traceability systems are often based on yield estimates per farm by individual sourcing companies. A farm which could be selling to multiple companies is monitored independently by the sourcing companies and if it appears to produce much more beans than its size should allow, this could potentially be due to selling beans produced on other farms such as those located in forest reserves. Clearly, the farmer has a big window through multiple sales based on different sourcing companies' yield estimates to sell beyond what they can produce. This is difficult to track per the current sourcing and data sharing arrangements, which means beans produced in forest reserve areas can still end up in the supply chain, making it difficult to exclude deforestation-based cocoa from supply chains.

Working with suppliers for long-term sustainable production in West Ghana

In response to a combination of these production challenges, since 2014 Touton has been working with farmers in ten districts in Ghana's High Forest Zone¹⁹ on progressive 'climate-smart agriculture' projects. It implements a six-pillar service delivery model for farmers providing a variety of support activities through Rural Service Centres (RSC) that help farmers produce more and better cocoa. Services provided include access to agro inputs and integrated agro services, such as training and individual coaching on rehabilitation, productivity and intensification, as well as access to finance, livelihood diversification and food security. Touton hopes to increase annual cocoa productivity from an average of 450kg per ha to 1 tonne per ha through this work²⁰. However, in two districts, Bia west and Juabeso, the company has now gone a step further and is piloting an additional seventh pillar of activity: Landscape governance to fully achieve climate-smart outcomes.

Leading the way at the landscape level: Touton in Bia West and Juabeso

Bia West and Juabeso administrative districts in the Western region of Ghana cover an area of 243,561 ha and have a population of approximately 150,000 people. The Western region is the largest cocoa producing region in the country and together the districts produce approximately 60,000 MT of cocoa. Bia district is the most important cocoa-growing area in the country and cocoa producers in the district have experienced significant yield gains since the introduction of intensification

policies beginning in 2003²¹. However, its forests are increasingly shrinking; it is also home to the endangered Roloway monkey, a global conservation priority species according to the International Union for the Conservation of Nature (IUCN)²².

Touton believes that Climate-Smart Cocoa can be produced in these districts, similar to other districts where the company has implemented programs. However, this would require the establishment of a land use governance procedure around the forest areas in these districts which involve all stakeholders involved in the landscape, potentially contributing to deforestation.

In light of this, the 'Partnership for Productivity Protection and Resilience in Cocoa Landscapes' (3PRCL) was officiated under an MOU in October 2017. Under Touton's leadership it brings together the Ghana Forestry Commission, Ghana Cocoa Board, Agro Eco-Louis Bolk Institute, Nature Conservation Research Centre (NCRC), SNV-Netherlands Development Organisation, traditional authority, a number of NGOs and private sector actors. The partnership unites efforts with the aim of catalyzing investment from the private sector to preserve approximately 160,000 ha of protected forest reserve and deliver socioeconomic benefits to an estimated 150,000 people by 2020.

The project led by Touton, firstly provides support to farmers within the landscape across different crop types via the old supplier support model. Two RSCs have been established in the districts that connect a network of 16 service providers working on the ground with farmers both inside and outside of Touton's direct supply chain. However, the project also requires Touton to collaborate closely with government entities in order to establish a landscape governance structure at regional, district and community levels. The governance structure will have oversight of land use management, forest protection, deforestation monitoring and improved productivity and livelihoods. Touton has also been working with partners as part of a national committee to develop a landscape standard for assessing Climate-Smart Cocoa. Work is now planned to nurture a market for this Climate-Smart Cocoa and to scale it up.

Aligning with Ghana's REDD+ Ambitions

The landscape programs in the Bia West and Juabeso districts were identified in close collaboration with the national government as a pilot for Ghana's Cocoa-Forest REDD+ Program (GCFRP) that has been approved by the World Bank's Forest Carbon Partnership Facility.

- 19 Ghana is divided into two main ecological zones: the High Forest Zone (HFZ) of southern Ghana covering 8.2 million ha (34%) and the northern Savannah Zone (SZ) covering 15.7 million ha (66%) http:// www.fao.org/docrep/005/y7210e/y7210e05.htm
- 20 https://www.confectionerynews.com/Article/2017/10/30/Touton-teams-with-Cocobod-to-tackle-forest-devastation-in-Ghana
- 21 http://r4dreview.iita.org/index.php/tag/redd/
- 22 https://portals.iucn.org/library/sites/library/files/documents/2015-033.pdf



The program aims to reduce deforestation rates across the country. A core component of this is the production of deforestation-free and sustainable cocoa in the High Forest Zones, in return for carbon payments. Jointly coordinated by the National REDD+ Secretariat (NRS) at the Forestry Commission (FC) and the Ghana Cocoa Board, and in partnership with a broad set of private and public-sector actors, the GCFRP program is constructed around five key pillars:

- Institutional Coordination and Measurement Reporting and Verification (MRV);
- Landscape Planning within Hotspot Intervention Areas (HIAs);
- Implementing Climate-Smart Cocoa to Increase Yields;
- d. Risk Management and Finance;
- e. Legislative and Policy Reforms.

Land use activities will eventually be implemented in six Hotspot Intervention Areas (HIAs) - priority areas for immediate and concentrated interventions at the farm and landscape levels. Each HIA will be governed by a local governance board of land owners, land users, local authority entities and community leaders and will engage with a formal consortium of private sector cocoa companies, NGOs, and government partners who will work together to bring resources to implement activities on the ground²³.

Implementation has begun in three HIAs, one of which is the Juabeso-Bia HIA. Touton has signed an MOU with the government to lead implementation of all interventions in the Bia-Juabeso HIA. Hence the work builds on the 3PRCL program adding additional elements to make it suitable as a pilot under the GCFRP conditions and structure. The project aims to reduce carbon emissions by 2.3 million tons annually by 2020, which could generate USD 11.5 million in revenue from carbon funds²⁴.



- 23 https://www.forestcarbonpartnership.org/sites/fcp/files/2017/June/ GCFRP_Carbon%20Fund_Final%20Draft_April%2022%202017-formatted.pdf
- 24 http://www.commodafrica.com/31-10-2017-accord-entre-touton-et-le-cocobod-pour-une-cacaoculture-sans-deforestation-au-ghana

Convening and Governance

Expanding the supplier support model in West Ghana: key motivators

In 2017, Touton convened all stakeholders they perceived as having an influence on the landscape in Bia West and Juabeso. This included farmers, but also logging companies, village chiefs, and government. The company led the establishment of the 3PCRL and brought together COCOBOD, the Forestry Commission, local authorities, key NGOs, and approached logging companies, competitors as well as many of the big buying companies sourcing from the region, including Cargill, Mondelez and Barry Callebaut.

Prior to Touton bringing together the stakeholders in 2017, COCOBOD had already approached the company, keen to get help packaging and scaling the RSC support model the company had established successfully to improve yields across other areas. Touton's farm-level efforts had been focussed on the PBC Ltd direct supply chain, reaching around 8,000 farmers, however, Touton's agreement with COCOBOD extends that work to reach up to 60,000 farmers in the region. The Forestry Commission and COCOBOD are also able to leverage interventions from other government led programs to build synergy.

Many of the cocoa buyers involved were already running farm-level sustainable production programs and were keen to take advantage of combining efforts, engaging government and benefiting from the farmer engagement structures already established by Touton via the RSCs. The logging companies have expressed a strong interest to contribute to the success of the program because engaging properly with farmers and the authorities around preventing encroachment will affect how their business will fare in future. At the community level, the chiefs are recognized as the spokespeople for the people and communities listen to them; their involvement is therefore essential for any engagement with local communities around the successful implementation of a forest governance framework.

Roles and responsibilities in the landscape to date

The expertise of a variety of private and public-sector actors has been leveraged in order to reach the main objectives of the program. Progress to date against the key project objectives are as follows:

Objective 1: Increase cocoa productivity to 1000 kg/ha

11,300 farms have been mapped and 7,165 producers have been trained on good agricultural practices and Climate-Smart Cocoa principles. These farmers have been certified under UTZ/Rainforest Alliance standards. To complement these efforts, the Cocoa Health and Extension division of COCOBOD, with the support of the Forest Investment Project (FIP), has been providing



training and farm management services on seedling distribution and spraying to all other cocoa farmers in the landscape. COCOBOD has distributed 1,310,000 cocoa seedlings, recruited 874 spraying and pruning gangs and 675 pollinators. Forestry Commission has also distributed 150,000 shade tree seedlings. The project is currently preparing for a landscape assessment against the soon to be established Ghana Climate-Smart Cocoa Standard.

Objective 2: Strengthen farmers' capacity and skills to run their farms like businesses targeting a minimum of 50,000 farmers

Touton is partnering with SNV Ghana to implement the Shaded Cocoa Agroforestry Systems (SCAFS) program to improve cocoa agroforestry, provide functional multistakeholder land use planning systems and a traceability system. The centres in the two districts have two nurseries which coordinate demand for 60,000 cocoa seedlings. 228 ha of old cocoa farms belonging to 430 farmers have been rehabilitated and 90 demo plots have been established on yield optimisation through soil fertility management and integrated crop pest management. All 11,300 farms received spraying services and service providers have been trained to provide services to farmers at a fee. An MOU has been signed with Advans Ghana, a savings and loans company, and financial training has been conducted in 40 communities for 1150 farmers. All these farmers now have bank accounts and can access some financial products, such as savings accounts and use of mobile money technology.

Objective 3: Increase farmer resilience with a focus on income diversification

A study aimed at introducing other crops which Touton trades in and that could complement cocoa such as annatto seeds, bees wax and kola nuts has been completed. The next step is to support farmers in producing these crops to meet national and/or global market expectations. In addition, as part of local income diversification efforts, twenty women have been trained in cassava flour production and are now training other farmers on their farms. An additional 40 women farmers received support to plant 40 acres of improved cassava. National markets for vegetables have been secured and farmers are being supported to supply such markets.

Objective 4: Provide farmers with the skills and tools to foster climate change adaptation, mitigation of greenhouse gas emissions, and increase carbon sequestration in cocoa-forest landscapes

COCOBOD and the Forestry Commission have led a national committee in drafting a Climate-Smart Cocoa Standard that provides a framework for companies to produce Climate-Smart Cocoa. Internal capacity has been built on the use of a developed climate-smart agriculture in cocoa manual led by the World Cocoa Foundation (WCF). It is envisioned that cocoa traders could eventually sell and market Climate-Smart Cocoa. This could serve as a basis to bring in supply chain financing to support landscape governance and deforestation monitoring work.



Objective 5: Improve economic development through landscape governance and land use planning

A draft governance framework has been produced under the leadership of NCRC, outlining the key roles of traditional authority, community, private and public sector in managing and monitoring the drivers of deforestation and is currently going through a consultation and validation process. The next phase will be to build capacity to collaboratively address all issues on deforestation within the landscape and put in place the necessary governance structures.

Solidaridad has signed an MOU with Sefwi Wiawso Traditional Council to support them in formalizing land access security. Communities in Boinzan and Proso sub districts have been sensitized on tree registration guidelines and land access security. Collaboration to discuss land security has begun in some areas. A participatory 3D model map of the landscape was developed in collaboration with farmers in Proso to begin resource-mapping and a land-use planning exercise.

The Forestry Commission has begun the mapping of all illegal farms in forest reserves to enable remediation action by the project as prescribed in the Cocoa and Forests Framework of action. An initial infrastructure for deforestation monitoring has been put in place using remote sensing technology to monitor deforestation activity in the landscape.

Drivers for aligning with national and international plans

In regard to the projects' alignment with the national government's REDD+ program, Ghana estimates that it could generate just over 10 million tCO2e emission reductions to be transacted under the Emission Reduction Programme Agreement (ERPA) during this period equivalent to a performance payment of USD 50 million. The Government of Ghana will provide USD 53 million in support to the implementation of its REDD+ program, but urgently needs private sector investment and Touton is currently engaging its competitors and buyers to support this effort.

The government will benefit from the program by successfully demonstrating that it can reduce deforestation and sustainably manage its forest resources and the ecosystem services they provide. The company also feels that any legislation developed at the national level by REDD+ should benefit Touton in the implementation of sustainable production activities and should help address operational bottlenecks in the supply chain. A deforestation accounting framework will also be established at the national level with which Touton will align and monitor its progress.

The Business Case: Scaling benefits for sustained growth and revenues

In the face of declining cocoa yields and climate change impact projections on the value chain, Touton made the strategic decision to expand its supplier support model to take a landscape approach to sustainable production. Senior executives within the organisation made the decision that strategic investments should be tied to the more holistic climate-smart, multi-stakeholder approach. Some of the key commercial opportunities it has sought to realize are described here.

"Cocoa production and sustainable forest management are closely linked, and strongly influence each other. The challenge is now to turn the vicious cycle of environmental degradation and low productivity into a virtuous one of sound environmental management and highly productive systems. The challenge is great. As is Touton's commitment to contribute to addressing it."

Mitigating climate change risk to ensure long-term supply and price stability

Global climatic changes are compounding local changes in the water cycle caused by localized deforestation in Ghana. These impacts are key drivers of falling productivity in the country and suggest consistent cocoa supply volumes may not be assured in the coming years²⁵. The future impacts of climate change on the suitability of areas for cocoa production in Ghana will vary regionally, and significant work is being done by the CGIAR Research Program on Climate Change, Agriculture and Food Security (CCAFS) and others to map the regional risk profiles and potential response strategies for the private sector and farmers operating in these areas²⁶. Touton has done its own analysis on local climatic impacts, shade trees and the impact of local forests on different production areas. The company has monitored crops in two different zones, one set in a highly forested zone and one set in a semi-deciduous zone. They recorded yields of 500-1000kg/ha in the highly forested zone

²⁵ https://cgspace.cgiar.org/bitstream/handle/10568/51470/Climate%20suitability%20for%20Cocoa%20farming.pdf

²⁶ https://cgspace.cgiar.org/rest/bitstreams/90968/retrieve

but yields significantly lower - only 250-400kg/ha - in the semi-deciduous zone, due to dryness of the area and no shade trees.

"We need to address climate issues as much as possible. If this continues, supply will be affected."

The 3PRCL landscape work in the Bia-Juabeso districts aims to mitigate impacts of climate change by preventing deforestation and increasing productivity. Understanding the importance of local forests on production yields in these particular districts, Touton prioritized a landscape approach and the establishment of a governance procedure around the forested areas. The company concluded that while interest in and uptake of developing climate-smart agricultural practices at the farm level may vary from farmer to farmer, preventing forest encroachment would only be successful if farmers were incentivized by a regulatory force, not only commercial opportunities. They see that engagement with the government in order to establish a mechanism around forest protection is the only way of ensuring the prevention of encroachment, and therefore the stability of local climatic conditions and production yields long term. By ensuring yields are maintained, the threat of supply shortage is mitigated and stability of price ensured.

"Forest governance mechanisms, if supported by government and enforced through law, will provide a strong framework for action."

A draft framework for the governance of the forest area and the roles of different actors has now been established and capacity building of different stakeholders on its implementation will follow.

Securing market position as a verified sourcing region for sustainable cocoa products

Global cocoa buyers are increasingly recognizing that deforestation and its impacts on local climatic conditions is a leading cause of decreasing yields in many cocoa producing regions. Most of the world's largest cocoa buyers (including all of the top twelve) have now established commitments to end deforestation in the global cocoa supply chain via their own corporate commitments and multi stakeholder commitments like the Cocoa and Forests Initiative. However, producing countries that are trying to respond to the demand for deforestation free cocoa face challenges. Loopholes

in traceability systems mean beans produced in forest reserve areas can still end up entering the supply chain, making it difficult to assure deforestation free cocoa to buyers.

"Traceability will fail without transparency, benefit sharing and landscape governance."

By engaging in a landscape approach and ensuring a strong governance mechanism around the forested areas, Touton will provide assurance to its customers that beans entering the supply chain are from deforestation-free sources. This will allow the company to continue to sell/begin selling to the global chocolate and cocoa companies that have signed the Cocoa and Forests Initiative commitment to eliminate deforestation. One of the main targets of the 3PCRL approach is to develop a common deforestation monitoring system for the landscape that traces farms both in and outside forest reserves. The project will provide regular reports to partners on deforestation status and other outcomes in the landscape under the REDD+ HIA management plan. This level of reporting will build the confidence of buyers and Touton will face opportunities for new business as more companies develop similar commitments and seek to establish sourcing regions that can assure deforestation-free produce.

Increased revenues and garnering support to sustain the landscape approach

One element of the multi-stakeholder landscape approach has seen Touton contributing to the development of the Climate-Smart Cocoa Standard by engaging at the national level with COCOBOD and the Forestry Commission. The draft standard provides a framework for companies to produce Climate-Smart Cocoa and a standard for assessing performance at the landscape scale. Once finalized, it will provide a benchmark against which the project could report on sustainability outcomes at the landscape scale.

In Ghana, the level of state involvement in the cocoa industry is significant. Any plans to operate at landscape scale must preclude the government's involvement and endorsement if they are to succeed. Only by working beyond traditional company boundaries, at a landscape level, is Touton able to engage regularly with other influential stakeholders and sit at a table to contribute to such a standard with the relevant government entities. The Forestry Commission is also working to establish a deforestation accounting framework for its national level commitments. The project aligns its monitoring and reporting so that communication by stakeholders at all levels has integrity in the eyes of the global market.



Climate change impact zones for cocoa



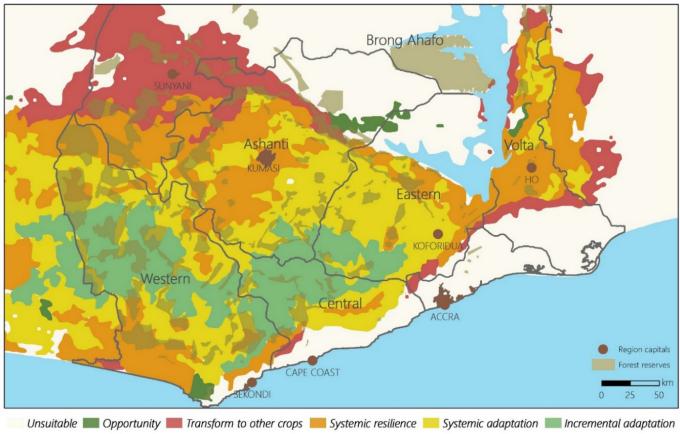


Figure 1: Map showing the distribution of climate change impact zones and dominant adaptation typology in Ghana²⁸

"Previously we had a good relationship with the government and CO-COBOD, but this new relationship on sustainability brings collaboration to a new level: now we sit alongside the government to develop a joint work program."

Establishing a trusted and government-endorsed product standard will allow Touton to sell Climate-Smart Cocoa to customers increasingly seeking deforestation-free product. This specialized product offering will increase revenues for the company and for COCOBOD, in a winwin proposition for both entities and the farmers upon which they rely.

In addition, it is envisioned that Touton could eventually use the connections established with the downstream supply chain and global market to serve as a basis to attract further supply chain financing for landscape governance and deforestation monitoring work.

The long-term commercial viability of the work is integral to the success of the 3PRCL. Touton has already engaged financial institutions to conduct analyses of the long-term financial viability of the RSCs and feels confident that they can be sustained financially over time. The Forestry Commission has been tasked with establishing a financially sustainable traceable supply chain and deforestation monitoring system for the program; continuing to attract external finance is a key element of achieving this. At the national level the success of the governments' REDD+ ambitions is also dependent on the ability to secure private sector finance.

Increased revenues by expanding the supply base adopting climate-smart principles

The 3PRCL landscape work in Bia-Juabeso districts targets farmers both inside and outside of Touton's direct supply chain. The company is currently working directly with around 8,000 farmers but the work involving multiple stakeholders aims to scale up these efforts and to eventually target 60,000 farmers. One element of the support provided aims to address the weak land ownership framework in Ghana which means that fragmented smallholder farms exist under a precarious legal status under the complex national legal land tenure system and those held under customary understanding.

"At the moment most farmers face land tenure challenges - Touton is working with partners to help farmers formalize their land rights so that they can improve their livelihoods."

Only by working closely with government entities, including the Forestry Commission, can Touton work to ensure these farmers are recognized in the eyes of the law. The landscape approach provides a platform for these efforts and for the skills of multiple stakeholders to be leveraged. NGO Solidaridad has also been brought in by Touton to engage traditional authorities to formalize land access security and tree tenure in the landscape. Without the local chieftains on board, the communities are very difficult to engage or support.

Table 1: Touton's business opportunities, realized by engaging at the landscape level

This table summarizes the key business motivations for Touton to engage in the landscape approach in Bia-Juabeso districts. It is built around the main commercial opportunities that could be realized by the company by engaging with the program and why a landscape approach in particular was necessary to achieve its objectives.

| Opportunities | Specific impact opportunity | Business/financial implications | Why can these opportunities not be realized within company boundaries? |
|--|--|---|---|
| Type of business opportunity | What specific driver offers an opportunity to the business? | What could this impact mean financially for the business? | Reason why the realization of the opportunity requires a landscape approach |
| Opportunity: Mitigating climate change risk to ensure long-term supply and price stability | Local climatic changes are driving falling productivity and suggest consistent cocoa supply volumes may not be assured in the coming years. Mitigating these risks will ensure yields are maintained and demand met. | By ensuring yields are maintained or improved, the threat of supply shortage is mitigated and stability of price ensured. | Touton is required to take a landscape approach in order to ensure the establishment of a governance procedure around the forested areas. Preventing forest encroachment would only be guaranteed with regulatory support. |
| Opportunity: Securing market position as a verified sourcing region for sustainable cocoa products | The landscape work can facilitate the region at large being recognized as a sustainable jurisdiction. The company can maintain and secure international contracts with large buyers in sustainable commodity markets looking for sustainable product sourcing areas. | Increased revenue through increased sales volumes from new buy- ers. | By engaging in a landscape approach and ensuring a strong governance mechanism around the forested areas, Touton will provide assurance to its customers that beans entering the supply chain from the region are from deforestation free sources. |
| Opportunity: Increased revenues by expanding the supply base adopting Climate-Smart Cocoa standard | If an increasing number of farmers can adopt the CSC standard, this will increase the supply base from which Touton can sell Climate-Smart Cocoa. | Increased revenues as Touton's sales and vol- umes increase due to increased supply. | Only by working closely with government entities, including the Forestry Commission, can Touton work to ensure these farmers adopt all aspects of CSC practices. The landscape approach provides a platform for these efforts and for the skills of multiple stakeholders (including NGOs experienced at engaging local authorities) to be leveraged. |

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