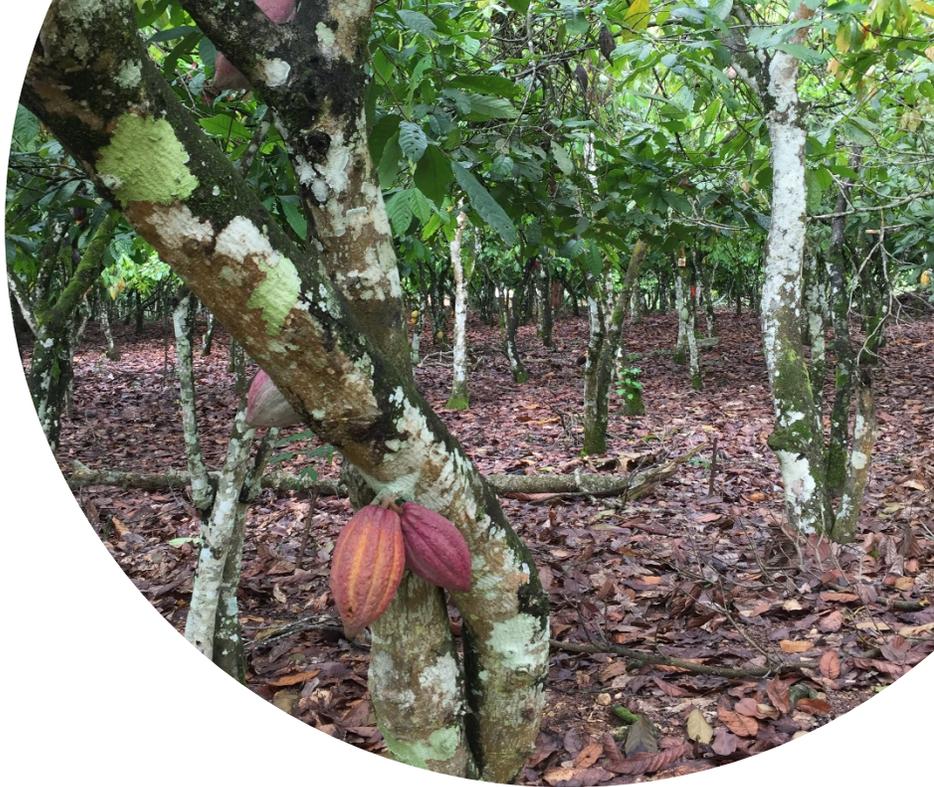




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## TENURE AND GLOBAL CLIMATE CHANGE PROGRAM

# TREE TENURE AND BENEFIT SHARING IN COCOA GROWING AREAS OF GHANA

IMPROVING TENURE SECURITY TO SUPPORT SUSTAINABLE COCOA PILOT

### SUMMARY

Discussions on tree tenure law and policy in Ghana revolve around the exploitation of timber with little policy debate on tenure of other forest products. This brief examines existing policies on timber exploitation and the reforms that are currently being proposed. It is informed by consultant reports commissioned by the Forestry Commission (FC) and tentative findings garnered from a pilot undertaken under the Tenure and Global Climate Change (TGCC) Program in Nyame Nnae, a cocoa farming community in the Asankrangwa district of Ghana. This brief argues that Ghana's timber policy has produced unintended outcomes and has never been aligned with the interests of customary landowners whose land management decisions have a direct impact on forest cover. Reforms being proposed skirt the main cause of the problem, create additional administrative hurdles for farmers and the FC, and do not address perverse incentives that work against landowner and farmer interests. This brief argues that to effectively create a balanced and sustainable sector, tree tenure law and policy needs to be simplified and re-aligned with the interests of landowners and farmers by transferring rights to all natural and planted trees to customary landowners off-reserve.

### BACKGROUND: COCOA, SHADE TREES AND DEFORESTATION

#### *Cocoa and Deforestation in Ghana*

Cocoa is a critically important commodity to the Government of Ghana (GOG) at national, regional, and local levels because it provides significant economic benefits that include jobs, improved livelihoods and social welfare, an expanded tax base, higher family and corporate income, and foreign exchange earnings growth. In 2010, cocoa accounted for eight percent of Ghana's gross domestic product (GDP),

PHOTO: WINROCK INTERNATIONAL

30 percent of total export earnings, and around 25 percent of the country's foreign exchange. However, cocoa produced by smallholders is also the leading agricultural product driving deforestation in Ghana.

Ghana has a total land area of 230,020 km<sup>2</sup> spanning three vegetative zones – high forest zone (HFZ) covering about 8.2 million hectares (ha) in the south, and the transitional and savannah zones covering 15.6 million ha in the middle to northern regions. Between 1900 and 1946, the area of high forest declined from 8 to 9 million ha to 4.4 million ha (The REDD Desk, 2018). Within the HFZ there are 1.27 million ha of land gazetted as forest reserves and national parks (“on-reserve”), where the majority of forests are located. The area of land outside gazetted areas (“off-reserve”) covers approximately 4.65 million ha comprised of settlements and infrastructure, agricultural lands<sup>1</sup>, fallow lands, and forest patches. Over the period 2000 to 2015<sup>2</sup>, an average of 138,000 ha of forest was lost each year from the high forest zone (Government of Ghana, 2016).

Conversion of forests to agricultural land was identified as the primary driver of deforestation during the reference period with an average of 10,000 ha of forest per year (1.65 million ha in total) converted to agriculture. Twenty-seven percent of agriculture conversion resulted from cocoa expansion, making it the single most important commodity driver of deforestation in the REDD+ program area. Other important drivers include timber extraction and mining (Government of Ghana, 2016).

Identifying a new pathway for cocoa production that does not rely on deforestation requires a careful understanding of cocoa's role in the national political economy as well as poverty alleviation. This is particularly important as cocoa productivity is falling. Cocoa production in Ghana rose from less than 500,000 tons in 2000 to 900,000 tons in 2010. Cocoa production for the 2014/2015 and 2015/2016 cocoa seasons reached only 730,000 and 690,000 tons, respectively. Since 2010, cocoa's productivity has worsened due to tenure insecurity, an elderly cocoa farming population, over-aged cocoa trees (estimated at 23 percent of total cocoa-growing area), high costs of cocoa tree removal, high incidence of pest and diseases (estimated at 25 percent of total area), and poor maintenance contributing to low yields. In 2016, Ghana's Cocoa Board recently announced plans to more than double cocoa output to 1.6 million tons by 2026.

Ghana is presently wrestling with two competing objectives. First, increase cocoa production to increase output and export earnings, which historically have been at the cost of natural forest. Second, maintain Ghana's last vestiges of forest, avoiding biodiversity loss and environmental degradation, reducing greenhouse gas emissions, and participating in international efforts to reduce deforestation and degradation. Underlying this is a complex and largely undocumented customary tenure regime that has historically incentivized clearing native forest for cocoa production, and currently acts as a barrier to reinvesting in unproductive farms. Meeting both objectives will require a new cocoa production paradigm that addresses tenure and other constraints to better manage the agricultural resource base and promote new investment in trees and agroforestry systems.

### Importance of Shade Trees in Ghana's Cocoa Landscape

Cocoa trees grow best in thinned forests or under planted shade. Young cocoa plants need shade to avoid physiological stress arising from direct exposure to the sun along with protection from competing weeds. As cocoa matures, the cocoa trees form a closed canopy that is less dependent on shade trees. Forests are thinned to allow for cocoa growth (see Figure 1). Beyond providing shade for sustainable cocoa systems, shade trees can be an important source of timber and fruit. If shade trees are removed, the influx of sunlight tends to boost yields in the short term. However, physiological stress, susceptibility

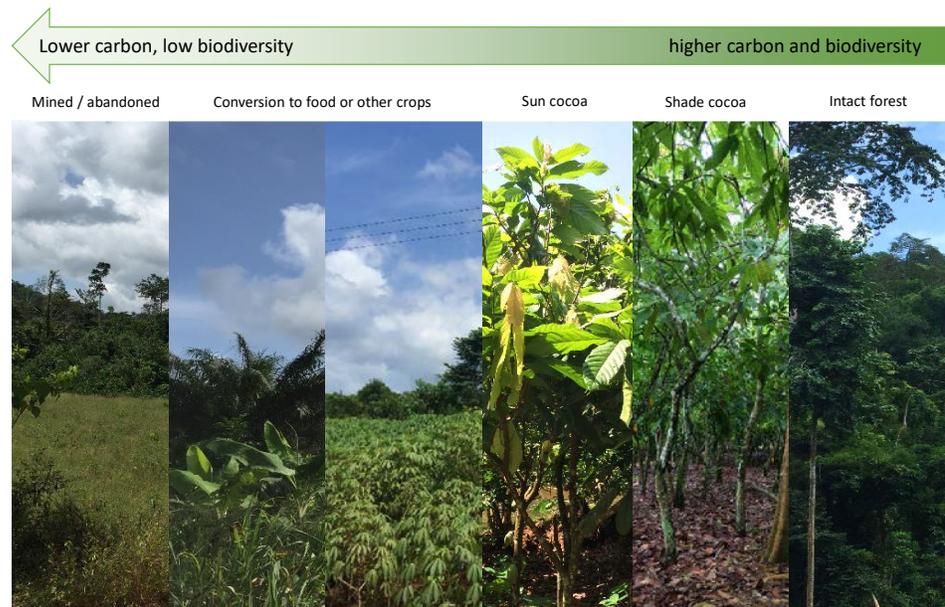
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<sup>1</sup> An estimated 1.8 million ha of HFZ is estimated to be planted in cocoa farms (Government of Ghana, 2017).

<sup>2</sup> 2000-2015 is the forest emission reference level for Ghana's Cocoa Forest REDD+ Program (GCFRP).

to pests and disease, and the need for higher chemical inputs (fertilizer and insecticides) associated with trees exposed to direct sun require improved farm management and increase production costs (Clough, Faust, & Tschardtke, 2009) that are often beyond the means of small cocoa farmers. For over a century, the consequence of this pathway in West Africa has been abandonment of old cocoa stands as cultivation shifts to new forested production areas (Acheampong, Dawoe, Bosu, & Asante, 2014; Clough et al., 2009).

**Figure 1: Biodiversity and Carbon Loss with Cocoa Land Use Change**



Agroforestry holds promise for sustainable cocoa production and carbon sequestration. In critical conservation areas of the Ecuadorean Chocó, for example, increasing shade density in experimental trials increased cocoa yield and farmer income until a tipping point was reached where yields began to decline (Waldron, Justicia, Smith, &

Sanchez, 2012). This tipping point of maximum yield lies at about 144 shade trees per ha, roughly equivalent to 40 percent canopy cover. However, according to Acheampong et al. (2014), most new cocoa planting has been in Ghana’s Western Region where 80 percent has been established without shade or with less than 10 percent canopy cover.

Providing optimal shade throughout the productive life of cocoa plants is important to achieve sustainable yields and sequester carbon. If landowners reaped the full benefit of timber tree extraction, they would have more incentive to avoid overcutting and over-thinning, and to plant new timber and non-timber species that are conducive to sustainable cocoa cultivation and forest harvesting. From all appearances, no individual farmer or group currently has incentive to protect or invest in timber and non-timber species that provide for forest canopy.<sup>3</sup>

Supporting Sustainable Cocoa and Reducing Deforestation

GCFRP is Ghana’s approach to reducing deforestation and increasing yield in the cocoa-growing region. GCFRP will leverage private sector investment in cocoa and government funding, and combine this with payments from emission reductions from the Forest Carbon Partnership Facility (FCPF) to help deliver results. It will be jointly coordinated by the National REDD+ Secretariat at the Forestry Commission (FC) and the Ghana Cocoa Board, in partnership with a broad set of private sector, public sector, civil society, traditional authority, and community stakeholders. GCFRP is being developed to reduce

<sup>3</sup> The timber policy bans landholders from harvesting any shade tree for commercial timber, whether or not that tree is considered of commercial value. The government grants concessions for exploitation of trees on farms, regardless of the tenure of the land. Allowance is made for harvesting for domestic use.

deforestation and forest degradation in the high forest zone through five pillars that comprehensively address key barriers to forest conservation and sustainable cocoa production. These five pillars are: i) institutional coordination and measurement, reporting, and verification; ii) landscape planning within hotspot interventional areas; iii) increasing yields via climate-smart cocoa; iv) risk management and finance; and, v) legislative and policy reform – including tree tenure (Government of Ghana, 2016).

Ghana’s government faces an enormous challenge in balancing demands for higher cocoa production with plans to minimize deforestation, environmental degradation, and biodiversity loss. Strategies aimed at preventing or reducing deforestation could play out differently in different contexts. For example, increasing tenure security and facilitating cocoa rehabilitation (intensification) may fail to reduce deforestation if land scarcity, continued population growth, poverty, and lax enforcement encourage encroachment. Or, it may reduce deforestation in zones where land use pressure is less extreme. There are multiple pathways that could reduce deforestation in Ghana, with greater or lesser relevance depending on context or location. Strategies aimed at afforestation and promoting agroforestry indirectly offset lands lost through deforestation; other strategies help to control deforestation directly:

**Table 1: Strategies to Curb Deforestation**

	Strategy	Constraint	Impact on Deforestation
	Maintain 30 to 40 percent forest canopy through planting of shade species, conservation & controlled cutting	Forest canopy cover is less than the 15 percent minimum requirement to be categorized as forest <sup>4</sup>	Builds back forests on cocoa farms via agroforestry to offset natural forest loss elsewhere
	Increase landowner incentives to practice bush fallow thereby increasing secondary forests	Landholders suffer from logging offtake that prevents restoration of forest cover for shaded cocoa	Helps to expand secondary growth forests off-reserve helping to offset deforestation elsewhere
	Promote land and tree tenure security and provide financial and extension support to rehabilitate cocoa	Over-aged cocoa farms are not rehabilitated because tenants risk losing their farms once the trees are cut down driving cocoa expansion	Incentivizes rehabilitation of existing cocoa farm land, reducing expansion into natural forests. Requires government and community mechanisms to curb encroachment
	Increasing jobs and incomes outside primary cocoa cultivation to reduce human pressure on land	Increasing land scarcity drives encroachment into gazetted forests regardless of cocoa intensification strategies due to population growth, poverty, and lack of alternative employment	Increase skills and employment opportunities that enable shifting labor out of primary cocoa cultivation and into value added, non-farm wage employment to reduce land use pressure

Given a ceiling on cocoa supply, intensification would reduce pressure on primary and secondary forests regardless of the size of forests left which is small and shrinking. But if the Ghana Cocoa Board continues to increase cocoa production targets beyond limits that enable sustainable cocoa cultivation and forest conservation, and there is not better policing or incentives to protect natural and secondary forests, further deforestation would be dampened but not deterred. Beyond strategies aimed at

<sup>4</sup> In line with requirements under the Clean Development Mechanism and REDD+ readiness efforts, Ghana has defined its open forests as being a minimum of one ha, having at least 15 percent canopy cover, and containing trees that are at least five meters tall (Government of Ghana, 2016). Ghana excludes agricultural plantations regardless of height and canopy cover from its forest definition, yet shaded cocoa is included under forest in Ghana. The shade trees in the cocoa agroforest would constitute a forest if they offer enough canopy cover and are taller than five meters in height. However, in eight of ten districts studied by Acheampong et al. (2014), crown cover did not qualify as forests because measurements fell below the 15 percent minimum threshold.

increasing tenure security and rehabilitating cocoa, other policy mechanisms will be required to effectively curb deforestation: land use planning to support and validate land use governance; public advocacy; a comprehensive strategy on optimal forest and cocoa production; increasing community livelihoods from sustainable forest management; and supporting non-farm employment opportunities as a profitable alternative to resource extraction, among others. Regardless, increases in tenure security will play an extremely important role in these strategies.

## **CURRENT STATORY AND CUSTOMARY TREE TENURE**

Current tree tenure and governance derives from customary and statutory laws, including the 1992 Constitution of Ghana that recognizes community claims of ownership on lands and forests.

### *Customary Law and Ownership of Lands and Forest Cover*

Ghana's forest cover mainly falls under customary land ownership.<sup>5</sup> At the apex is the Allodial title held by the "Stool" that represents the community. The Allodial has ownership rights for economic utilization only over lands deemed to be communally owned by the whole community and are usually lands reserved by legislation as forest reserves or in community resource management areas. For the great majority of secondary forests in Ghana, ownership rights for economic utilization are held under customary freehold or usufruct.

There is a third group of customary land rights owners, comprising mostly non-indigenes (e.g. abunu<sup>6</sup> holders), who have entered into land right agreements with the Allodial directly or with extended family customary freehold owners.<sup>7</sup> The land agreements vary but in general grant powers to non-indigenes to farm, exploit forest products, and/or leave lands in fallow.

In addition, many customary rights are held communally and individually. Customary held communal rights include, for example, the right of every member of the community to enter onto another person's land to gather wild kola nuts, firewood, or wild raffia. Privately held rights, for example, include harvesting the produce of planted trees and crops. On the whole, these rules operate well and have not been interfered with by government.

### *Current Statutory Tree Tenure Law and Policy*

Statutory law and policy pertain almost exclusively to commercial exploitation of timber trees and support a multiplicity of rights, interests, entitlements, and beliefs in land and forest resources that vary based on the status or category of the forest. However, ownership of land does not necessarily translate into ownership of the naturally occurring resources the land holds. The main operating tree tenure

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<sup>5</sup> The Government of Ghana (2017) estimates that well over 80 percent of land in Ghana's Cocoa Forest REDD+ Programme (GCFRP) area is held under customary tenure.

<sup>6</sup> Abunu contracts are widespread in the cocoa sector and consist of two generic types. Under a commonly observed abunu contract in cocoa production, a usufruct holder or allodial titleholder enters an agreement with a stranger farmer to work the forest and bring the entire farm to maturity. Once the farm matures, it is divided in half between the stranger farmer and the landlord. The stranger farmer gains exclusive and nearly perpetual rights over his/her portion of the cocoa farm, subject to the condition that the land must remain in cocoa. However, once land is cleared of old cocoa trees, the landlord retains the right to reclaim the land, although landlords and tenants can and do widely disagree on this assertion. A variant of abunu (half share) is akin to a sharecropping agreement. The landlord, besides contributing the land, also contributes resources (labor or other inputs) to the tenant to create a cocoa farm. Upon maturity, the harvest is shared annually in halves, the farm is not divided and the stranger farmer is expected to vacate the land once the cocoa farming ceases. Under abusa, another sharecropping variant, a farm owner hires a caretaker to manage the farm in exchange for a share of crop harvest: two-thirds to the landowner (one to defray farm costs) and one-third to the caretaker. The abunu (half-share) and abusa differ only in the sharing formula in the Twi language: i.e., abunu meaning sharing in equal halves and abusa in equal thirds.

<sup>7</sup> Customary freeholds create the equivalent of private rights for extended families within the indigene group.

statutes and policies are the 1948 Forestry Policy; the 1962 Concessions Act; the 1992 Convention on Biological Diversity (International Law); and, the 1994 Forest and Wildlife Policy.

**Table 1: Summary of Current Tree Tenure Law and Implications for Cocoa Farmers**

<b>Forest Classification</b>	<b>Current Law and Policy</b>	<b>Implications for Cocoa Farmers</b>
<p><i>Naturally Occurring Trees Off-Reserve</i> Trees occurring off forest reserves. They include trees on farms and in secondary forests.</p>	<p>The traditional authority owns the trees, but the Forestry Commission holds all rights over disposal; i.e., all trees are held by the state in trust for the communities concerned. The state grants licenses for the exploitation of the timber and allocates royalties: 55 percent to district assemblies, 25 percent to the alienation holder (stool/skin chief), and ten percent to the traditional council after an administrative charge of ten percent has been levied by the administrator of stool lands.</p>	<p>The farmer or landowner who manages the trees may have his/her operations disrupted when trees are cut. Additionally, he/she receives no direct benefit from the cutting of the trees, a disincentive to sustainable forest management. As a result, landowners and farmers remove trees from off-reserve land, particularly given the usually uncompensated damage that logging companies cause to cocoa when they harvest timber.<sup>8</sup></p>
<p><i>Naturally Occurring Trees On-Reserve</i> Naturally grown or growing trees on forest reserves created on any land that the President decides to gazette on the advice of the Forestry Commission.</p>	<p>Control, management, and exploitation of these trees are vested in the state and exercised through the Forestry Commission. Royalties are paid to the community that owns the lands.</p>	<p>Same as for naturally occurring trees off-reserve, though there are few cocoa farms operating on-reserve.</p>
<p><i>Planted Trees Off-Reserve</i> Trees planted on lands other than forest reserves.</p>	<p>Plantation owners have ownership and exploitation rights. For trees planted for shade in cocoa farms, the situation is less clear. The Concessions Act 1962 (Act 124) gives the government management rights over all naturally growing or planted trees, and landowners and users cannot cut trees for commercial reasons.</p>	<p>A farmer can plant trees to provide shade throughout the productive life of his/her cocoa farm, but in practice the classification of these trees as being planted or naturally occurring is unclear. As a result, no individual or group has incentive to protect or invest in timber and non-timber species that provide for forest canopy, fearing that the state still has the power to grant concessions over trees which could lead to destruction of cocoa farms.</p>
<p><i>Planted Trees On-Reserve</i> Trees planted by government, organizations, groups, or individuals (farmers) on any land set aside as a forest reserve.</p>	<p>When planted by government, trees are treated the same as naturally occurring trees on-reserve. When planted by non-government, prior contractual arrangements on how the benefits are to be shared are made with the government.</p>	<p>For cocoa farmers operating on-reserve, the implications are the same as for cocoa farmers operating off-reserve.</p>

<sup>8</sup> There is a rationale for reallocating royalties to local government and traditional authorities, but not to individual landowners; i.e., revenue returned to local authorities can be used to support rural infrastructure (roads, schools, utility distribution, and improved water and sanitation), indirectly benefitting communities via local revenue sharing. However, these amenities are hardly apparent in most rural cocoa farming areas.

The policy, as exercised, creates a confusing timber tree categorization to determine who or what entity is entitled to revenue transfers (benefit sharing) from government. Current policy divides commercial timber into two categories: trees planted by a farmer or landowner (“planted trees”) and trees determined to grow naturally (not planted) on a landowner’s farm or on lands left to fallow – i.e., “naturally growing trees.” It is the latter which is claimed by government and grants under concessions for timber extraction. Distinctions are also made between trees on forest reserves (“on-reserve”) and trees planted outside forest reserves (“off-reserve”).

Operationalizing this categorization in practice has been challenging. First, implementing the policy and assessing what is planted and not involves huge monitoring and information costs, and bears an extremely heavy administrative burden. The FC of the Ministry of Lands and Natural Resources, which is tasked with administering the regime, sends scouts across the forest zone of Ghana to monitor compliance, but the number of scouts is woefully inadequate relative to the vast areas of forest cover. Consequently, illegal logging and collusion between timber companies and landowners is rampant.<sup>9</sup> The system also exposes FC staff who police the system to fraud and corruption. Second, the policy distorts incentives and drives landowners and farmers to destroy trees (more below) or makes them reluctant to incorporate tree planting as part of their customary land management practices.

By claiming all naturally growing trees as the government’s domain, Ghana’s timber policy effectively expropriates all rights over timber exploitation. The government then heavily regulates logging and captures revenue from logging concessions, but otherwise does not invest in or bear the cost of tree management. Apart from public forest reserves (where cutting the forest to create farms is illegal), customary landowners can cut the forest on their lands for cocoa cultivation which historically has been the principal driver of deforestation. It is a landowner exploiting trees for commercial timber within these lands that is illegal. The fact that customary freeholders are not entitled to any direct revenues from trees considered to be naturally growing on their land discourages them from expending resources and effort to prevent illegal logging themselves.

#### Implications of the Current Policy for Cocoa Farmers

While the current policy of allocating concessions to timber companies in exchange for royalties generates revenues, creates jobs, and culls trees from the forest landscape, the policy also creates conflict between landowners, farmers, and timber companies. As noted by Acheampong et al. (2014), farmers appear misinformed about the benefits of tall story shade species and, even more importantly, fell valuable timber species to discourage timber contractors from coming onto their land.

Tree tenure and land rights are also intimately interwoven. Lack of appreciation of this fundamental point has led to government policies on the commercial exploitation of trees that serve as disincentives to farmers and landowners on whose decisions the nation depends for maintaining or

#### **Why Farmers Destroy Trees on Cocoa Farms**

- “When timber contractors cut timber trees they destroy the cocoa, so I cut them first.”
- “I am unaware of the importance of trees to cocoa.”
- “I cut down and sell timber for income and roofing of buildings.”
- “I destroy my trees to prevent chainsaw operators from harvesting the trees and destroying my farm.”
- “I am told that trees aren’t good for cocoa.”
- “If I cut the trees, it prevents concessionaires from coming to harvest the timber.”

Source: Acheampong et al. (2014, p. 51)

<sup>9</sup> The FC employs staff in every district to prevent illegal loggings, police concessions, and fight forest and wildlife crime. The FC is recruiting and training up to 1,000 new field staff (forest guards and range supervisors) for this purpose in forest reserves; as of December 2017, 415 staff had been recruited and trained. This level of staff effort could be reduced or made more effective if customary landowners received revenue from trees harvested on their lands, creating incentives for landowners to police timber trees themselves.

extending forest cover.<sup>10</sup> Moreover, West Africa in general, and Ghana in particular, shares a common cultural heritage where planting commercial trees establishes a long-term claim of ownership to the land underneath for the life of the tree. This feature of the customary system both strengthens rights of tree ownership if allowed by the landowner, and creates conflict between the tree planter and the landowner if the act of tree planting is seen as a covert measure to assert rights to land ownership.

The interplay between government policy, timber extraction, and planting trees to claim land ownership creates perverse outcomes that include: planted trees pulled up by customary landholders; land disputes between tree planters and customary landholders; and disincentives to plant commercial trees. For trees categorized as naturally occurring, landowners and farmers are not given any revenues directly when trees are harvested, creating two major disincentives:

1. **Farmers have little or no control over management of timber species in the cocoa landscape.** The policy undercuts farmer interest to plant or leave trees for optimal shade. It removes management control over when to harvest trees, prevents benefit sharing in their harvest, and introduces risk that tree felling by logging companies will ruin their cocoa without compensation. Farmers often express reluctance to plant trees on their farms, and sometimes destroy trees to prevent damage caused by concessionaires or illegal loggers.
2. **Current policy destroys incentives to plant and/or nurture timber trees on fallow lands.** Customary freehold or usufruct land owners almost always leave portions of family lands idle to grow back to bush in order to regain lost fertility. It is the cumulative sum of these lands that constitute the secondary forest cover of Ghana. Planting of timber trees to promote forest regrowth would be positive for sustainable cocoa cultivation. However, the categorization of timber trees as planted or naturally growing is arbitrary and suits the government's interest to harvest tree revenue for itself. Policies aimed at influencing tree tenure in secondary forests ought to target the extended family owners of customary freehold or usufruct landholder. A policy that grants ownership of trees to landowners, whether planted or naturally growing, would encourage tree planting as part of their bush fallow land management strategies. However, current policy expropriates rights over (naturally growing) trees in secondary forests and fails to negotiate equitable benefit sharing. Rather it treats those trees as communally owned and channels revenues to, the Allodial instead, thus perverting incentives to plant and maintain trees or police them from illegal loggers.

The current policy of managing timber species is driving forest canopy cover toward suboptimal levels of low shade. As a result, secondary forest is not being protected and no one, other than the government, has an incentive to plant and conserve timber species to maintain the shade.

## **PROPOSED TREE TENURE REFORM: ANALYSIS AND RECOMENDATIONS**

### Current Proposals for Tree Tenure Reform

The FC is aware of challenges with the current law and policy. New policy approaches are being considered and tested (Table 3). The GOG is designing policies to give ownership and use rights to farmers by investing huge capital in sound, fair, and equitable land and tree tenure regimes to create forest estates. Implementation of these forest sector initiatives is currently occurring under various national programs namely: a) GCFRP; b) Voluntary Partnership Agreement with the EU; c) Forest Investment Program; and, d) the Cocoa Forest Initiative. Projects are proposing better benefit-sharing agreements by vesting ownership and/or usufructory rights in farmers, landowners, and communities.

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<sup>10</sup> See consultant report by Clement Kojo Akapme. (2016). *Development of a framework on tree tenure and benefit sharing scheme (legal reform proposals)*. Ministry of Lands & Natural Resources.

Two important policy documents are driving the reform proposals: the 2012 Tree Tenure and Benefit Sharing Policy; and the 2016 Tree Tenure and Benefit Sharing Framework in Ghana.

The 2012 Tree Tenure and Benefit Sharing Policy has made adequate provisions to deal with weaknesses identified and to: a) ensure better collection and greater equity in the distribution of tree concession revenues; b) allocate tree tenure rights by law; and, c) streamline the collection of stumpage fees and similar taxes and distribute them equitably by law. Two aspects of proposed policy changes are noteworthy to incentivize farmers and forest-dependent communities to engage in sustainable forest management, and to plant and preserve economic trees on their farms. First, farmers and landowners will have full ownership of trees on their farms and be able to enter into benefit-sharing arrangements; and second, landowners will be assigned *bona fide* rights to their trees in secondary forests. However, these proposals are still new and much work yet needs to be done to operationalize their implementation in practice.

**Table 3: Summary of Current Proposed Changes to Tree Tenure**

Forest Classification	Current Proposed Changes
Naturally Occurring Trees Off-Reserve	No change
Naturally Occurring Trees On-Reserve	No change
Planted Trees Off-Reserve	This applies to most cocoa farms. The current proposal states that: <ol style="list-style-type: none"> <li>A farmer has the right to negotiate benefit-sharing arrangements from trees that he/she plants/nurtures with the landowner;</li> <li>A farmer has the right to dispose and gain economic benefit of trees that s/he plants and nurtures; and,</li> <li>A decentralized land title registration will allow farmers to demarcate and register their lands and trees in the community/district to prove title.</li> </ol>
Planted Trees On-Reserve	The state will not play any key management role and is only paid a fee for the regulatory role it plays to allocate resources. Farmers and landowners have full ownership of the trees on farms and enter benefit sharing arrangements based on the traditional agricultural sharing systems in their areas. For trees in secondary forests, landowners are considered to have <i>bona fide</i> ownership and management rights. Pre-existing agreements between previous farmers and landowners must be respected.

### TGCC Sustainable Cocoa Pilot and Proposed Reforms

In 2016, Hershey’s and AgroEcom Ghana Ltd (AGL), a subsidiary of Ecom Agroindustrial Corp (ECOM) and licensed buying company which supplies cocoa to Hershey’s, began work with the United States Agency for International Development (USAID)-funded Tenure and Global Climate Change (TGCC) Program to gain a better understanding of how to address the complex challenge of deforestation around smallholder cocoa farming in Ghana. This work resulted in an assessment and recommendations for future work, captured in the report *Land and Natural Resource Governance and Tenure for Enabling Sustainable Cocoa Cultivation in Ghana*.<sup>11</sup> The report describes an interlinked set of interventions that encourage replanting old cocoa farms with shaded cocoa systems while reducing land use pressures on the forest fringe. Following extensive discussions between USAID, TGCC, and AGL, the team decided to implement a reduced set of activities that were achievable in a short timeframe to pilot ways to improve tenure security and productivity and reduce deforestation in the cocoa sector of Ghana.

<sup>11</sup> See the following report for additional background and context for the implementation plan: <https://www.land-links.org/document/tgcc-assessment-land-natural-resource-governance-tenure-enabling-sustainable-cocoa-cultivation-ghana/>.

This project contained four specific objectives:

1. Increase tenure security of smallholder cocoa farmers through clarifying and documenting the rights of landholders and tenants that discourage removing old cocoa trees under *stranger tenancy* contracts.
2. Promote the increase in carbon stocks in cocoa farms over the long term by explaining new FC policy on tree tenure and documenting tenants' and landlords' beneficial interests in shade trees.
3. Replant old, unproductive cocoa farms to increase productivity over the next five to ten years. This requires developing a financing model to replant old cocoa farms and provide extension services to farmers.
4. Develop lessons and recommendations for the GOG, GCFRP, the World Cocoa Foundation, Tropical Forest Alliance (TFA) 2020 partners, and others working on related topics with smallholder farmers to allow the pilot to be replicated and scaled up over time.

The pilot was conducted in Nyame Nnae, a cocoa farming community in the Asankrangwa district of the Western Region, between April and December 2017. The pilot's goal was to better understand and test the components of a model for public-private collaboration to help smallholder cocoa farmers in Ghana increase tenure security, replant old cocoa farms, increase yields and productivity, and reduce deforestation and degradation. By working with farmers to clarify, document, and defend their land and tree resource rights, the pilot attempted to demonstrate that cocoa productivity could be increased on existing farms, thereby increasing cocoa productivity while reducing deforestation at the forest fringe.<sup>12</sup>

The team reviewed existing policy and tracked the debate and the proposals on tree registration being spearheaded by the FC. The pilot discussed tree tenure with the community, reviewed pilot tree registration documentation, and discussed mapping shade tree locations in the process of demarcating farm boundaries under the pilot. Community views and understandings of tree tenure were gauged through a rapid assessment survey that combined focus group interviews (women's group, elders' group, migrant farmers' group, and indigene landowners' group) and a household survey of all household heads of the Nyame Nnae community. The community was further engaged on tree rights in planted cocoa farms to establish the extent to which commercial trees are incorporated by farmers as shade trees on their farms. In general farmers' views on commercial tree tenure was that the government owns "timber," with the household survey reporting the following:

- 89 percent of respondents reported little or no ability to make decisions about clearing forest land for additional cocoa. Of these, 91 percent said they needed approval from the government, two percent needed approval from a landlord or chief, and three percent needed approval from a family member. This response could be attributed to what the community considers "forest" and its location next to a forest reserve that is being respected by the community. Remote sensing analysis shows high levels of historic deforestation around the community, with lower levels within the forest reserve.
- A total of nine percent of respondents said they had full decision-making control to clear forest – though paradoxically 42 percent of these said they also needed approval from the government and a further 27 percent said they needed approval from the chief or landlord.

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<sup>12</sup> See Roth, Antwi, O'Sullivan, & Sommerville. (2018). *Improving tenure security to support sustainable cocoa – Final report for a complete summary of the project and its findings.*

- With regard to shade trees on cocoa farms, farmers reported various organizations (e.g., the Ghana Cocoa Board and licensed buying companies) as planting shade trees on their farms. Seventy-five percent of respondents said they had full control over these trees (including rights to plant, harvest, or replace), while eight percent stated they had little or no control. Of those who stated full control, 26 percent still referred to needing to consult with either their family, landlord, or chief – with less than 0.5 percent (i.e., one respondent) stating a need to consult with the government regarding their shade trees. Of the eight percent with little or no control, all respondents referred to needing approval from their landlord or chief regarding the shade trees.

Farmers were aware of the tree registration proposals being piloted. However, they generally appeared confused as to the extent to which registration clarified their rights over planted trees. When queried further, most farmers could not confirm whether their trees had been registered or not.

The pilot team decided not to test the draft tree tenure registration documentation in the community. During implementation, many aspects of the tree registration system proposed by the FC were still in flux, and there was insufficient clarity on the status of the policy to test tree registration as part of land rights documentation. There was also some hesitation to test tree registration given that the team had a number of reservations regarding the proposed policy changes, and their long-term efficacy. In particular, the pilot struggled with the appropriate system for securing property rights of land and trees while maintaining affordable costs of creating and updating registers. The administrative costs of registering trees are steep. Unlike land which is fixed in place for perpetuity, trees incur periodic planting and cutting, which requires frequent updating of records and complicates monitoring aspects of tree registration. In addition, there is a risk of two overlapping and competing rights administration systems, one for land and one for trees, that are governed by different agencies.

The system of tree registration as now proposed is confounded by problems of infeasibility and unsustainability. It is infeasible in the sense of generating vast piles of tree registration documentation (as with land in the customary land secretariats) that will have little likelihood of validating ownership because the system is inaccessible. It is unsustainable given that the resources required to monitor, administrate, and enforce the system would likely make it prohibitively expensive to implement. An alternative approach would be to attach tree rights to the land documentation process to create one unified, low-cost rights administration system tied to one parcel map, thereby avoiding incoherence and easing rights delivery.

#### *Tree Tenure Reform: Analysis and Recommendations*

The general implicit principle of customary land tenure in the forest zone of Ghana is that rights over land incorporate rights over all that is attached to it, including the forest cover. These can be communally held rights or rights held by indigene extended families.<sup>13</sup> Statutory law, on the other hand, modifies this by granting the government rights over naturally occurring trees. This serves as a disincentive to customary landowners and farmers who are critical players in the quest to maintain or expand forest cover. While the current proposed reforms outlined above are a step in the right direction, they do not go far enough, and suffer from three main drawbacks:

- I. The maintenance of expropriating powers over naturally occurring trees off-reserves blunts the policy's effectiveness. The current policy states that farmers own planted trees, but differentiating between natural and planted trees causes confusion and scope for abuse. The proposed changes arguably do not correct this and may exacerbate the problem further, as

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<sup>13</sup> The same may apply to non-indigenes as well depending on the nature of the land agreement held with the chief or indigene family.

failure to register planted shade trees may result in de facto treatment as naturally occurring and therefore subject to state expropriation. In communities such as Nyame Nnae where most farmers already consider themselves owners of their shade trees, partial registration may be particularly problematic if failure to register is seen as, or results in, a loss of rights.

2. The proposed creation of a tree tenure registry creates an unnecessarily costly, bureaucratic, and likely unworkable regulatory burden on farmers and the FC. There is a significant burden to first create the registry and then maintain it over time. To be effective, the database will need to register millions of trees on hundreds of thousands of plots, and maintain this database over time. As trees may be grown and cut many times without a transfer of land tenure, keeping a registry of tree and land rights up to date will be particularly onerous. This is concerning given that the customary land secretariats (charged with recording customary land titles) are non-functional in most of Ghana.
3. The reluctance to align policy with the realities of ownership structures of customary land rights regimes misses the opportunity to address a historical policy mistake. There is also common law precedent that trees and other structures on the land belong to the landowner, with only subsoil mineral rights resting with the state. Aligning statutory law with existing customary law and common law precedent should be compatible with Ghana's legal system.

To tackle the inherent disincentives and lighten the administrative burden of policing the sector, the reforms should transfer rights over all natural and planted timber and non-timber trees to the relevant customary land rights holders. Operationalizing such an approach should be possible within existing customary law. Though customary land ownership over forest lands are unrecorded, it would not be difficult to identify landowning families and individuals who are entitled to timber revenues. From this, two related policy reform recommendations emerge.

First, the tree tenure policy reforms need to be bolder. A more comprehensive solution requires moving away from expropriating rights over timber trees. Ownership of all trees off-reserve, however they come to be situated on one's land, should be deemed to reside in the relevant customary landowner(s) or farmers.<sup>14</sup> Policy and FC staff should concentrate administrative efforts on enhancing existing structures for regulating and taxing the sector. Resources currently expended in establishing and maintaining tree tenure registries should be moved to providing tree husbandry advice and licensing and policing loggers. This will help landowners manage their trees, cut down on illegal logging, and increase collection of stumpage fees from legal logging.<sup>15</sup> Once customary landowners' rights over trees are recognized, and powers for planning, timing, and proceeds from harvesting timber trees are vested in them, landowners and farmers would police their trees in much the same way as they currently police their cash or food crops. Such policy direction would help minimize the need to send FC staff into the bush to police illegal logging (and the corruption it entails), and would also eliminate the current confusing policy of categorizing trees into planted or naturally occurring trees, which then seems to warrant establishment of registers to enforce compliance.

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<sup>14</sup> Returning tree tenure to landowners does not need to be accompanied by a transfer of rights to carbon credits. It has been long held that rights to carbon credits created under public international law are sovereign rights *ab initio*, and do not become an individual right without a legal mechanism or instrument to effect this transfer. See for example Freestone and Streck (2005); Streck et al. (2008); and Angelsen, et al. (2012).

<sup>15</sup> While shifting property rights from government back to individual farmers would begin to remove perverse incentives, there would need to be stronger government regulation on land use conservation and environmental stewardship to control against wanton extraction or creation of negative externalities that affect others (erosion, poor quality streams and rivers, and protection of gazette forests where statutory rights need to be protected).

Second, a related policy reform emerges from a missed opportunity that arises from the non-recognition of customary landowners' rights over "naturally" growing trees on fallow lands. Secondary forests of Ghana exist precisely because customary landowning families make a conscious land management decision to leave parts of their lands in fallow (i.e., to return to bush). This practice is passive in the sense that lands are left idle to regenerate with shrubs and trees. Timber policy should be tweaked to recognize customary landowning families' rights over all timber trees located on their fallow lands and make them entitled directly to revenues accruing from their exploitation. This may trigger a practice whereby instead of leaving nature to replenish fallow lands, landowners plant commercial trees as part of their land management practice.

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