FOREST CARBON IN GHANA:

The Legal Framework and the Role of Community Resource Management Areas (CREMAs)

From the Katoomba Group's Legal Initiative Country Study Series

THE ROCK AND PARTNERS

Nature Conservation Research Centre

the katoomba group

FOREST TRENDS

Acknowledgments

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Spotlight on Community Resource Management Areas

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List of Abbreviations

COA	Court of Appeal
COD	Certificate of Devolution
CREMA	Community Resource Management Area
CRMC	Community Resource Management Committee
FCPF	Forest Carbon Partnership Facility
FLEGT	Forest Law Enforcement Governance and Trade
GHG	Greenhouse Gas
MOU	Memorandum of Understanding
NTFP	Non-Timber Forest Products
OASL	Office of the Administrator of Stool Lands
REDD	Reducing Emissions from Deforestation and Forest Degradation
REDD+	Reducing Emissions from Deforestation and Forest Degradation, Conservation, Sustainable Management of Forests and Enhancement of Forest Carbon Stocks in Developing Countries
R-PP	REDD+ Preparation Proposal
TUC	Timber Utilization Contract
UNFCCC	United Nations Framework Convention on Climate Change

Executive Summary

It is a critical time for Ghana in terms of forest conservation and REDD+. Forest management and policy reform are moving forward on various fronts, including via the REDD+ Readiness Preparation processes of the World Bank's Forest Carbon Partnership Facility (FCPF). Yet, as recognized in the country's REDD+ Readiness Preparation Proposal (R-PP), reaching REDD+ readiness will be challenging.

Legal and policy reform is an important piece of the puzzle, but it will take time. In the meantime, it is important to develop a clear understanding of the implications for REDD+ of the current legal and policy framework, not only to support effective and efficient reforms, but also to provide certainty and stability for early action on REDD+. Fundamental legal and policy issues for REDD+ include how forest carbon rights and benefits are allocated and what regulatory framework applies to REDD+ activities. These questions, in turn, depend upon how carbon is classified under the law – whether as a natural resource like minerals, timber, or non-timber forest products, an ecosystem services of the trees themselves, an intangible good tied to land, or something else.

This report was commissioned by Forest Trends and the Katoomba Group to provide insight into Ghanaian statutory and case law and its potential implications for REDD+. As the legal nature of carbon rights has yet to be determined, the report does not purport to conclusively describe the proper treatment of carbon rights and benefits under existing law, but rather to outline implications and uncertainties for carbon rights and benefit sharing based on an in-depth examination of statutory and common law.

The report also focuses on the Community Resource Management Area (CREMA) as a potential platform for ensuring secure rights and equitable benefit sharing for individuals, families, communities, and traditional authorities responsible for generating carbon benefits via REDD+. While CREMAs are broadly consistent with REDD+, these entities currently lack formal legal recognition. To gain legal legitimacy as an entity distinct from, and able to act on behalf of, its individual members, a CREMA must therefore form a company or other legally-recognized entity. However, this additional layer of organization may soon become unnecessary, as legislation now before the parliament aims to provide legal certainty for CREMAs.

Despite remaining uncertainties, the building blocks for effective, equitable REDD+ exist in Ghana. Going forward, among the most important steps for policymakers to take to support REDD+ are:

(1) Clearly defining the legal nature of, and applicable legal framework for, REDD+ emission reductions or removals;
(2) Eliminating perverse incentives that encourage tree-cutting by landowners and work against REDD+; and
(3) Providing straightforward, accessible institutional options for REDD+ projects that involve local people and support equitable benefit sharing.

In parallel to the publication of this report, Nature Conservation Research Centre (NCRC) is leading a peer-review process within Ghana, which is expected to result in substantial revisions and updates.

Introduction

Forests cover just over 4 billion hectares or about 31% of the total land area in the world[1] and provide food and shelter to millions of people. In addition, forests offer a wide range of marketable wood and non-wood products, such as timber, fruits, fuel wood and medicinal plants, as well as environmental services like biodiversity conservation, water supply, carbon sequestration, flood control, and protection against soil erosion and desertification.

Although forests are increasingly being recognized for their environmental, social and economic value, global deforestation rates remain high with approximately 13 million hectares of forest cover being lost annually. Reducing Emissions from Deforestation and Forest Degradation (REDD) is a mechanism that aims to compensate developing countries for efforts made to preserve and improve forest ecosystems by providing value to standing forests. REDD+ describes a set of activities that, in addition to reducing emissions from deforestation and forest degradation, also include conservation, sustainable management of forests, and enhancement of forest carbon stocks in developing countries.[2]

Deforestation and forest degradation are leading contributors to climate change, accounting for about 17% of greenhouse gas (GHG) emissions into the atmosphere.[3] Forest loss is therefore a major issue in climate change mitigation. The Bali Road Map agreed at the 13th Conference of the Parties (COP 13) outlined the process for the inclusion of REDD in an international agreement to follow the Kyoto Protocol to the United Nations Framework Convention on Climate Change (UNFCCC).[4] Moreover, at COP 15 in Copenhagen and COP 16 in Cancun, the parties to the UNFCCC agreed in principle for REDD+ to be included as a mechanism for creating recognized GHG emission reductions or removals.[5] However, the framework to be utilized is still under negotiation.

Implementing REDD+ in developing countries is a complicated, resource-intensive and costly process, but offers monetary incentives that can bring about large-scale emission reductions and removals through the sequestration of carbon in trees and other forest resources, while potentially mitigating other environmental and social problems in developing countries. A number of global development partners provide incentives and financial assistance to developing countries to enable them to develop policies and capacities for REDD+.[6]

As one of the countries admitted to participate in the REDD+ Readiness process of the World Bank's Forest Carbon Partnership Facility (FCPF), Ghana submitted a Revised REDD+ Preparation Proposal (R-PP)[7] that was accepted by the FCPF in March 2010. Furthermore, Ghana appears to be strategically positioned to take advantage of REDD+ due to its existing affiliations with other forest

[1] FAO 2011, p. 2.
[2] UNFCCC 2008, ¶1(b)(iii).
[3] IPCC. 2007, p. 36.
[4] UNFCCC 2008.
[5] UNFCCC 2009, ¶6, ¶8, ¶10; UNFCCC 2011, §II(C).
[6] Among these development partners are the World Bank through its Forest Carbon Partnership Facility (FCPF), the UN-REDD Programme, the Government of Norway's International Climate Forest initiative, and the Australian Government's Forest Facility.
[7] Forestry Commission of Ghana 2010.

governance initiatives, such as the Forest Law Enforcement Governance and Trade (FLEGT),[8] the Voluntary Partnership Agreement with the EU,[9] and the UN's Non Legally Binding Instrument on all Types of Forests,[10] amongst others.

However, a number of factors work against REDD+ implementation in Ghana, including the opportunity cost of land, weak or inadequate institutional and legal frameworks, uncertainty in land, forest, and tree tenure systems, and concentration of forest resource management in the central government which is detrimental to forest communities. If REDD+ is to be successfully implemented in Ghana, it will be necessary to address these barriers.

Legal and policy reform, which touches on all of these factors, has an important role to play in laying the foundation for REDD+. First, however, it is necessary to understand the implications of the current legal and policy framework for REDD+, not only for project participants to structure near-term REDD+ activities and pilots, but also for decision-makers to effectively target legal and policy changes. Therefore, this report reviews the existing legal (legislative and common law) framework relating to land and forest tenure in Ghana with a focus on the Community Resource Management Areas (CREMA) structure as a potential platform for ensuring secure rights and equitable benefit sharing to individuals, families, communities, and traditional authorities responsible for generating carbon benefits.

The report is structured as follows. Section I provides background information on the state and trends of Ghana's forests as well as relevant legislation for REDD+. Section II analyzes statutory and common law related to rights in land, forests, and natural resources in Ghana, touching on land tenure, mineral rights, forest tenure, carbon rights, and the need for collaboration across different sectors. Section III describes Community Resource Management Areas and analyzes their use as an institutional setting for equitable REDD+ projects. Section IV concludes.

I Background

1 State and Trends of Ghana's Forests

Ghana's approximately 9.2 million hectares of forest covers about 40% of the country's total land area and is divided into two main zones – the savannah woodlands in the north and the tropical high forest in the south. Savannah woodlands are the dominant forest type; tropical high forest covers only about 7% of Ghana's land area, almost all of which is found in reserves or other protected areas. There are presently 282 forest reserves and 15 wildlife sanctuaries/protected areas, which occupy about 16% of the land area in Ghana. While estimates vary, it is clear that little intact forest exists outside of forest reserves.[11]

The forests in Ghana have been experiencing a dramatic decline since the 1970s. Many forest reserves are heavily encroached and degraded, and the condition of off-reserve forests is poor due to

[8] Council of the European Union 2005.
[9] Council of the European Union 2009.
[10] United Nations General Assembly 2007.
[11] FAO 2001, p. 7. For the purpose of FAO 2001, intact forest means forest with greater than 40% canopy closure.

excessive logging, unsustainable agriculture, and other factors.[12] Plant and animal populations are becoming increasingly fragmented, heightening concerns about the future of the timber industry and the future quality of the environment. By and large, the problem of loss of forest cover in Ghana is seen as one of gradual degradation driven by:

- Forest industry over capacity;
- Policy and market failures in the timber industry;
- Increasing population in both rural and urban areas and a consequent increase in demand for agricultural and wood products;
- High demand for wood and forest products on the international market;
- Dependence on charcoal and wood fuel for rural and urban energy;
- Habitat loss and/or conversion;
- Limited technology development in farming systems and continued reliance on slash-and-burn methods to maintain soil fertility;
- Inadequate legal and policy framework; and
- Poor forest governance.

2 Relevant Legislation for REDD+ in Ghana

The legislation and policies in Ghana relevant to REDD+ are highlighted below. Laws that have been repealed are noted accordingly, but are nevertheless included because they are important for some of the cases described later on in this report.

Constitution of 1992, Section 269 provides for the establishment, composition and functions of the present Forestry Commission and gives the President control over all mineral resources of Ghana, to be exercised on behalf of the people as a whole, amongst other important provisions.

Forest Policy of 1948 was the first formal forest policy in Ghana. It provided for conservation and protection of the forest environment, management of the permanent forest estate on a sustained yield basis, and, ultimately, the conversion of off-reserve forests.

Forest and Wildlife Policy of 1994 is the current formal policy on forest and wildlife and aims to further conservation and sustainable development of natural resources to ensure optimum benefits to all segments of society, amongst other goals.

Forestry Commission Act of 1993 (Act 453) (*repealed by the Forestry Commission Act of 1999*) established the former Forestry Commission.

Forestry Commission Act of 1999 (Act 453) repeals the Forestry Commission Act of 1993 and establishes the present Forestry Commission.

Administration of Lands Act of 1962 (Act 123) gives the President power to acquire stool land that will be held in trust (in the public interest) and vests the management of all stool land revenue in the central government.

[12] Boon et al. 2006.

Land Title Registration Law of 1986 (PNDCL) 153 provides for the registration of title to lands.

Forest Ordinance of 1927 (Cap 157) is the principal statute governing the constitution and management of forest reserves in Ghana. The ordinance vests in the central government the power to create forest and protected area reserves.

Trees and Timber Ordinance No. 20 of 1949 (Cap 158) (*repealed by the Trees and Timber Decree of 1974*) sought to regulate and control the timber trade through the registration and issuance of property marks to concession holders and the issuance of licenses and permits for the felling of forest trees.

Trees and Timber Decree of 1974 (NRCD 273) continues the operation of the system of property marks and makes it a criminal offence to fell timber for export without a valid property mark.

Trees and Timber (Amendment) Law of 1983 (PNDCL 70) imposes harsher penalties for violation of the Trees and Timber Decree.

Trees and Timber Amendment Act of 1994 (Act 493) provides for the biannual renewal of property marks and the use of levies and other forest fees in timber trade regulation. Under this Act, government authorities have imposed levies on the export of logs and substantially increased the fee for the renewal of property marks.

Mining and Minerals Act of 2006 (Act 706) (*repeals and replaces Minerals Act of 1962*) vests the ownership of all natural resources upon land in Ghana in the President in trust for the people.

Forest Protection Decree of 1974 (NRCD 243) attempts to protect the integrity of forest reserves by prohibiting virtually all activities therein if done without the written authorization of the Forestry Department.

Forest Protection (Amendment) Act of 1986 (PNDCL 142) imposes harsher penalties for violation of the Forest Protection Decree.

Forest Protection Amendment Act of 2002 (Act 624) amends the Forest Protection Decree of 1974 and provides higher penalties for offences.

Control of Bush Fires Law of 1983 (PNDCL 46) seeks to control the setting of bush fires by criminalizing the intentional, reckless, or negligent causing of such fires and holding the offender liable for all consequences of the fire.

Concessions Ordinance of 1939 (Cap 136) (*repealed by the Concessions Act of 1962*), along with earlier similar legislation, provided for a system for traditional and forest-holding authorities to grant timber harvesting rights, and determine and collect revenue in both reserve and off -reserve forests.

Concessions Act of 1962 (Act 124) vests the right to grant timber concessions and the management of all timber resources both on and off reserve in the central government. The Act was repealed by the Timber Resource Management Act of 1997, with the exception of sections 1,

exempting stool lands from most provisions of the act, and 16, regarding forest reserves and timber concessions.

Protected Timber Lands Act of 1959 (Cap 34) (*repealed by the Trees and Timber Decree of 1974*) provided for the declaration of off-reserve forest lands as protected timber lands. This measure gave the Forestry Department power to regulate and control farm development and expansion in these areas.

Timber Resources Management Act of 1997 (Act 547) introduces Timber Utilization Contracts (TUCs) for timber harvesting and enhanced benefits for landowners and farmers for harvesting of trees on their land, and provides for payment of royalties in respect of timber operations.

Timber Resources Management Regulations of 1998 establishes regulations for the management of timber pursuant to the Timber Resources Management Act of 1997.

Interim Measures for Controlling Illegal Harvesting Outside Forest Reserves of 1995 introduces a new system for harvesting off-reserve timber that includes the farmer's rights to veto proposed harvesting and to receive compensation for crop damage.

Economic Plant Protection Act of 1979 abolishes the grant of timber felling rights in farms having trees, such as cocoa, with economic value.

Forest Plantation Development Fund Act of 2000 (Act 583) provides for the grant of financial assistance for the development of private forest plantations on lands suitable for commercial timber production.

Proposed Forestry Act aims to consolidate and to replace all existing forestry legislation. The act proposes clear identification of land and the forest holding communities that would be the primary clients of a proposed Forest Service, which would pursue sustainable forest management. The bill is now before parliament and has yet to be passed into law.

II Rights in Land, Forests and Natural Resources

Ghanaian law does not specify the set of rights that are implicated by REDD+ projects or programs and also does not determine who might be eligible to receive incentives for forest conservation or restoration. Rights in REDD+ therefore must be inferred from existing laws regulating rights in land, forests, and natural resources.

Forests in Ghana are often subject to conflicting, yet equally legitimate, claims by various parties. Confusion is created in part because Ghana's forest land has belonged to local forest communities from time immemorial under the indigenous land-holding system, but is now regulated by the government under statutory law. In addition, forest conservation and increasing needs for fertile agricultural lands often clash. There have therefore been a series of conflicts between the government and the original forest dwellers, as well as between the forest guards and farmers, that are deeply rooted in confusion about the land tenure system and statutory laws regulating land

ownership in Ghana, which are characterized by indeterminate boundaries of landowning groups leading to conflicts and litigation.[13]

This part of the report describes statutory and common law related to land tenure, mineral rights, forest tenure, and carbon rights. These rights intersect with diverse economic sectors, particularly timber, agriculture, mining, infrastructure, and energy. As the final section of this part emphasizes, cross-sector collaboration is therefore extremely important to creating and implementing effective REDD+ policy.

1 Land Tenure in Ghana

In Ghana, there is a dual system of land ownership and control: customary (land held according to customary law) and statutory (public land). Ownership of public lands is vested in the President on behalf of and in trust for the people of Ghana. Land held under customary law is owned by stools, families, or clans and is generally held in trust by the chief, head of family, or clan for the benefit of its members. Customary title is almost always circumscribed by statutory title.

Customary title to land has always been considered to include forests on that land over which the head of the community has power to grant use rights to its subjects. For example, in **Kone v. Akomea et al.**,[14] the plaintiff sued for ownership of a piece of forest land and the Court of Appeal (COA) held that a stool is entitled to allocate a subject farmer any unoccupied forest land in the community.

Importantly, land under customary ownership is regarded as belonging to the whole social group (stool, family, or clan) and not to any individual. Yet individuals within the collective enjoy virtually unrestricted rights of access and use. The head of the community is a "symbol of the residuary, reversionary and ultimate ownership of all land held by the collective."[15] Therefore, property must serve the greater interest of the whole community. In the often-cited words of a famous Ghanaian chief, Nana Sir Ofori Ata 1, "Land belongs to a vast family of whom many are dead, a few are living and a countless host is still unborn."

In **Hammand v. Randolph et al.**,[16] the then-West Africa Court of Appeal delivered judgment on the nature of customary land tenure in Ghana, noting:

> "[T]he notion of individual ownership is quite foreign to native ideas. Land belongs to the community, the village or the family, never to the individual. All the members of the community, village or family have an equal right to the land, but in every case the chief or headman of the community or village or head of the family, has charge of the land, and in loose mode of speech is sometimes called the owner. He is to some extent in the position of a trustee, and as such holds the land for the use of the community or family. He has control of it, and any member who wants a piece of it

[13] Sittie 2006.
[14] (1962) 2 GLR 98.
[15] Mabogunje 1992.
[16] (1936-37) 3 WACA at 43.

> to cultivate or build a house upon, goes to him for it. But the land so given still remains the property of the community or family."

The customary law of Ghana consists of unwritten social and traditional norms. Before colonization, Ghana experienced a variety of traditional political states, many of which had legal structures headed by chiefs. In establishing a colonial legal system for Ghana, native tribunals were allowed to continue to apply customary law except in areas where the colonial courts were to apply the common law and statutory laws. This arrangement led to the establishment of a pluralistic legal system consisting of both customary law on one hand, and statutory and common law on the other. The effects of this pluralistic legal system have been particularly significant for Ghanaian land law, where title is predominantly determined by customary law.

1.1 Customary Law and Vacant Land

During the colonial era, the land rights of indigenous people were not expropriated by the colonial government despite the government's attempts to do so. Indigenous land rights were protected by customary laws that said there was no vacant land in areas subject to customary law – what might appear to be vacant land was in reality vested in the community (the corporate legal person for the purposes of customary law).

For example, in the case of **Ababio v. Kanga**,[17] which involved a claim to allegedly ownerless land, the court held as follows: "Now in the Gold Coast there is no land without an owner, all vacant lands being attached to the nearest stool in which they may be said to vest for the community represented by that particular stool."

Also noteworthy is the fact that for a claim on vacant forest land to be maintained, the claimant must have cleared or cultivated the land, or otherwise tangibly reduced the forest into their possession. This is the reason why forest land is cleared and burned and/or trees felled to show actual possession.[18] For example, in **Kone v. Akomea et al.**,[19] the plaintiff sued for ownership of a piece of forest land which the plaintiff said he had reserved for further cultivation but which the defendant had trespassed upon and cultivated. The trial local court by a majority found for the plaintiffs. However, on appeal it was held that to maintain a claim over vacant forest land, the claimant be able to demonstrate actual possession, which the plaintiffs failed to do. It is not enough merely to reserve land for future cultivation

1.2 Types of Customary Ownership

Under Ghanaian customary law, there are different possible levels of ownership of, and rights to, land and forest, including full alloidal title, usufructuary rights, and rights gained by things like pledges, mortgages, and tenancy.

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[17] (1932) WACA 253 at 155.
[18] See Egyin v. Aye (1962) 2 GLR at 187; see also Norquaye-Tetteh (Emmanuel) v. Malm (1959) GLR 368.
[19] Supra at note 14.

1.2.1 Alloidal Title

The fullest level of ownership is what has been referred to as the allodial title, which is vested in the whole community. Lands under an alloidal title are referred to as *stool lands*[20] in the south and *skin lands* in the north. The chief is the head of stool or skin lands, with the stool or skin therefore representing the continuation of the chieftaincy in Ghana. As written by Justice of the Supreme Court per Adade in **Akyea-Djamson v. Duagbor**:

> "The entities which owned land allodially in Ghana were the stools, families or individual[s]. They were the original owners of the land under the indigenous law and their title was founded on or could be traced to immemorial and long continued enjoyment under a claim of right originating from first settlement, secession or acquisition by conquest. Accordingly, every individual land owner under customary law must be able to trace his title to one of those entities."[21]

Ownership of stool land lies with the appropriate chief holding the land on behalf of, and in trust for, all of the stool's subjects in accordance with customary usage. The head or chief administers stool land in conjunction with the management council. Alienation of stool land can only be done by the chief acting with the consent or concurrence of the council – any grant of land made by the stool without the council's consent is voidable.[22]

In **Fiaklu v. Adjiani**,[23] by a deed of conveyance dated 15 February 1952, the Korle priest granted a piece of Kokomlemle land to "S," who by another conveyance dated 11th November 1952 purported to transfer his title to the plaintiff. Pursuant to this transfer, the plaintiff went into possession until 1962 when the defendant, relying on a deed of conveyance executed in his favor by the same Korle priest and assented to by the Gbese and Ga stools, commenced building operations on the land. The plaintiff sued the defendant for a declaration of title to the land amongst other claims. The claim was, however, dismissed by the High Court on the grounds of defective title. On appeal, the COA dismissed the appeal and held that, whatever the customary practice, the Korle priest was legally incompetent to make valid absolute grants of Kokomlemle lands without the prior consent of the Gbese and Ga stools. Consequently, in the absence of such consent, the conveyance executed by the Korle priest in favour of S, which was the plaintiff's root of title, passed no title whatsoever to him and was void *ab initio*.

Also, in **George Grant & Co. v. Brobery et al.**,[24] disputed land was part of an area which had been granted by the Asantehene to the Agonahene after the Denkyira War. The Agonahene had placed the predecessors of the disputing parties on portions of the land. The sub-chiefs and elders of the Agonahene (including these predecessors in interest) had taken part in the negotiations over the original grant, but the predecessors objected at a late stage in the negotiations and were not present

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[20] Section 31 of the Administration of Land Act of 1962 (Act 123) defined stool land as "land controlled by any person for the benefit of subject or members of a stool, clan, company or community, as the case may be and all lands in the Upper and Northern Regions, other than lands vested in the President."
[21] (1989-90) 1 GLR 223.
[22] Hammand v. Randolph et al., supra at note 16.
[23] (1972) 2 GLR at 209.
[24] D.C. Land 48-51 at 109 - in Re Agona (Ashanti) Timber Concession, Concession Enquiry No.420.

on the day of execution of the grant. The grant was therefore opposed on the grounds that the consent and concurrence of the predecessors in interest was necessary and that the grant was invalid because they had not signed it. It was held that a chief could act only with the knowledge, consent or concurrence of all or a majority of his sub-chief, counselors and elders. When this condition was fulfilled, his act was valid and binding on the stool in respect of the stool property and the refusal of other parties to sign the deed in no way affected its validity.

1.2.2 Usufructuary Title

The second type of ownership recognized under Ghanaian customary law is a usufruct or usufructuary title, a concurrent and lesser title that individuals or families may hold in land, the allodial title to which resides with the stool or community. Where a usufructuary grant is validly made either to a stool subject or a stranger, it can be held in perpetuity, provided that the holder of the usufruct recognizes the absolute title of the stool or community**.**

Allodial and usufructuary title are separate but simultaneous sets of rights in the same land. The stool cannot divest the usufructuary of his title by alienating it to another without the consent and concurrence of the usufructuary.[25]

In **BP (West Africa) Ltd v. Boateng**,[26] the Kwatu stool made an oral grant of land in 1953 to the defendant "for as long as he paid an annual rent of £G9 (9 Ghanaian pounds)". The defendant thereupon entered the land and started trading. In 1957, the South Kwatu local council was established. This council converted the defendants grant into a 5-year lease, which was later renewed for another 10 years commencing from March 1961. Towards the expiration of the 5-year lease, the plaintiff offered to do business jointly with the defendant and, at the plaintiff's request, a copy of the 10 year lease was given to him. Soon after, the plaintiff entered independent negotiations with the local council to lease defendant's land to the plaintiff. By a written notice, the council terminated the defendant's 10-year lease on 5th May 1962 and leased the land in dispute to the plaintiff on 8th May 1962. The plaintiff then sued to recover damages for trespass from the defendant. It was held that the first grant made to the defendant by the Kwatu stool was a perpetual one, terminable only upon the extinction of the defendant's lineal successors or through a claim by him adverse to the title of the grantor.

In **Thompson v. Mensah**,[27] the court held that "the usufructuary is regarded as the owner of the area of land reduced into his possession; he can alienate voluntarily to a fellow subject or involuntarily to a judgment creditor without the prior consent of the stool. There is practically no limitation over his right to alienate that usufructuary title." As long as the absolute title of the stool is recognized, the usufructuary title remains valid unless the title-holder expressly abandons his or her rights or dies without valid heirs. Also, in the case of **Baidoo v. Osei & Owusu**,[28] the court held that a subject of the stool or a stranger-grantee of the stool, for that matter, can maintain an action

[25] Ohimen v. Adjei (1957) 2 WALR 275; see also Norquaye-Tetteh (Emmanuel) v. Malm, supra note 18.
[26] (1963)1 GLR 232.
[27] (1957) 3 WALR 240.
[28] (1957) 3 WALR 298; see also Oblee v. Armah & Affipong (1958) 3 WALR 484.

against even the stool in defense of the usufructuary title and may void any disposition in favor of a third party that affects the usufruct and that takes place without the consent of the usufructuary.

Although the rights of the usufructuary to the land must be recognized and preserved by the stool, the stool as the overall owner can repossess these rights in the event of abandonment or non-use by the usufructuary.

In **Adjei v. Grumah**,[29] a stranger farmer ("A") married to a woman from Mim brought an action in the District Court Goaso, against "G" for trespass and for specific damages to crops that A claimed had been destroyed on the land in dispute. A claimed that the Mimhene granted him a tract of undeveloped forest to cultivate. He reduced the land into his possession and planted cocoa trees on it. However, G subsequently entered that land and destroyed 100 cocoa trees on it. G in his defense contended that he had purchased the land in dispute from the Mimhene. He denied destroying any cocoa trees on it because the land was undeveloped forest land. The Mimhene gave evidence in favor of G that the stool had granted him a portion of undeveloped forest within the larger area earlier granted to A, after A had only been able to cultivate a small portion of the land. Twenty years after the grant to A, and in accordance with local custom, the stool argued that it had the right to re-enter stool land because there was failure to develop it within a reasonable time. The trial court gave judgment for A on the grounds that no condition of forfeiture for non-development was made known to A. An appeal by G to the High Court was allowed, and the High Court reversed. On a further appeal by A, the Court of Appeal (COA) held in favor of G, dismissing the appeal on the basis that re-entry of undeveloped stool forest land was a realistic customary approach to development of land because it ensured development within a reasonable period after a land grant.

The chief's position vis-a-vis stool land is that of a fiduciary. He or she is vested with the power to manage and administer stool property and is under an obligation to do so in the general interest of the community. However, where a subject has acquired a usufructuary title on any part of the stool land, the stool's allodial title is limited by the set of rights included in the concept of the usufructuary title.

1.2.3 Other Land Rights

Apart from alloidal and usufructuary titles, pledges, mortgages, and rental of land are all common practices under customary law. For example, there are three types of share-cropping tenancy agreements: *Abusa*, *Abunu, and Dibimadibi.*

- Under an *Abusa* agreement, the tenant farmer uses his or her own resources to clear and cultivate uncultivated land that belongs to the landlord. Typically, the tenant will agree to clear the land and fully plant it with cash crops within a certain period of time, say 8-10 years. The tenant farmer is entitled to two thirds of the crops, while the landlord is entitled to the remaining one third.
- In comparison, under an *Abunu* agreement, the tenant comes in to rehabilitate an existing farm, with the landowner contributing to establishing crops (typically food crops). Farm produce is then shared equally between the tenant farmer and the landlord.

[29] (1982-83) GLR 985.

- A *Dibimadibi* agreement is similar to Abusa and Abunu, but the sharing ratio is negotiable and generally it is the land and not the produce that is shared.

In **Fanyie et al. v. Lamptey**,[30] the plaintiff tenant and the defendant landlord were both illiterate. The plaintiff sued the defendant in the High Court for a declaration that the plaintiff was an *Abusa* tenant and for an order compelling the defendant to enter into a written agreement to that effect. The plaintiff pleaded and the defendants admitted that the land which he gave out to the plaintiff was forest land and that the plaintiffs expended their own energy and resources in cultivating the land. While these particulars were incidents of an *Abusa* tenancy, the defendant argued that plaintiff had agreed to hold the land as an *Abunu* tenant and was bound by that agreement. On appeal, the Court of Appeal (COA) held that a plaintiff who alleged that he or she was an *Abusa* tenant had to prove that the land was uncultivated forest and that the plaintiff invested funds and labor to create the farm. Because the defendant had stipulated these facts, the plaintiff was relieved of his burden of proof. The burden was therefore on the defendant to show that it was not an *Abusa* tenancy, which the defendant failed to do. The COA therefore held in favor of the plaintiff. The court referred to the case of **Akofi v. Wiresi & Abagya**,[31] where it was stated:

> "[U]nder the *Abusa* system the tenant pays all expenses in connection with the working of the property, the landowner not contributing towards the cost of labor, while under the *Ebuenu* or one-half system, the cost of making the farm is in the first instance borne by the landlord and the farmer – [the] tenant is then placed in charge of the farm to maintain and improve it. As the tenant does not contribute to the cost of making the farm, he gets only one half of the farm."

1.3 Statutory Law and Customary Land Ownership

After gaining independence, Ghana's government gradually took over the administration and management of land by issuing legislation and statutes. While the customary land law has not been abolished, the state systems for administering land effectively monopolize all important land management functions. Under the 1992 Constitution no disposition or development of stool land shall be made unless the Regional Lands Commission certifies that it is consistent with relevant development plans.[32]

As held by Justice of the Supreme Court Ocran in **Omaboe III v. A.G. & Land Commission et al.**,[33]

> "[T]here is a further restriction on the powers of the stools even as the holders of the allodial title. Under Article 267(3) [of the 1992 Constitution] there can be no disposition of an interest in such lands and no development thereof, unless the Regional Lands Commission of the region in which the land is situated has certified

[30] (1987-88) 2 GLR 269.
[31] (1957) 2 WALR 257, Article 259.
[32] Article 267(3).
[33] (2005-2006) SCGLR 579, 599 Para D.

that such an act is consistent with the development plan approved by the planning authority for the area concerned."

Also, by statute, all revenue and income from land is to be paid into a Stool Land Account to be distributed as follows:[34]

- 10% to the Administrator of Stool Lands for administrative expenses;
- 55% (of the remainder) to the relevant District Assembly;
- 20% (of the remainder) to the relevant Traditional Authority; and
- 25% (of the remainders) to the relevant landowning stool.

In **Omanhene of Sefwi-Wiawso v. Donkor**,[35] the defendant's father obtained a piece of land for farming from the plaintiff, the Sefwi-Wiaso paramount stool, for which he paid an annual customary fee of £G4 13s (4 Ghanaian pounds, 13 shillings). On the death of the defendant's father, the defendant, as customary successor to his late father, paid to the plaintiff £G15 by way of homage. The plaintiff then required him to enter into a fresh agreement to pay an annual tribute of £G18 and subsequently brought an action to enforce this payment. Judgment was given for the defendant and the plaintiff appealed. In dismissing the appeal, the COA held that the action instituted by the plaintiff was illegal because it was against Section 17 of the Administration of Stool Lands Act of 1962, which provides that only the minister responsible for lands can bring an action to enforce payment of stool revenue.

In the more recent Supreme Court case of **Klu v. Kowadu Araku**,[36] the plaintiff, the paramount chief of the Dormaa Traditional area, alleged that in 1924 his stool granted land to a group of persons led by the defendant on terms that required that the group pay to the stool a customary rent of £G100 per annum. Rent was regularly paid until 1960 when it suddenly ceased. The plaintiff therefore instituted an action to recover £G600 arrears of rent for the period 1960-1965 inclusive. The defendant contended that the plaintiff could not maintain the action in view of the provisions of the Administration of Lands Act (1962) Act 123, which assigned to the minister the responsibility of collecting revenue from all stool lands. It was held in favor of the defendant that the duty to collect revenue from land subject to Act 123 was expressly assigned to the minister in Section 17 of the Act.[37]

In 1986, the Compulsory Land Title Registration Law of 1986 (PNDCL152) was introduced to give certainty in land titles, facilitate proof of title and render land dealings in Ghana safe, simple, and cheap to prevent frauds relating to purchases. Previously, private and customary lands transactions were governed by the Deeds Registry System[38] under the Land Registry Act 1962. The Deeds Registry System did not provide for accurate maps, leading to incidences of double registration of the same piece of land. The root of the problem was that the title registration process begun in 1962 was implemented without regard to existing ownership patterns. The land registration law used

[34] Article 267(6) and Section 17 of the Administration of Lands Act of 1962.
[35] (1965) GLR 462.
[36] (2009) SCGLR at 741.
[37] Bekoe v. Serebour et al. (1977) 1 GLR 118 also deals with the collection of revenue on stool land.
[38] Conveyancing Decree 1973 and the Lands Registry Act of 1962.

individual title certificates and failed to account for customary land-holding patterns to determine the real land owners prior to registration. Also, the low quality of maps and records of the existing land administration system made conversion from deeds to title almost impossible. The uncooperative attitude of multiple agencies involved in land administration, poor public education, lack of technical skills, and the sporadic implementation of the land registration law created more problems.[39] The net effect was that people who had no valid claim to land title ended up being registered as owners with titles that could only be nullified by the court.

Mechanic Lloyd Assembly Plant Ltd. v. Nartey[40] concerned the village of Fafraha, part of the Labadi rural lands acquired by the stool of Labadi through conquest. The village was subsequently settled by members of the Agbawe quarter of Labadi. In 1976, the head of Fafraha "OK" granted a 9.12 acre plot to the plaintiff in a grant that was signed by OK alone. The plaintiff took up residence on the granted land. Soon after, the Labadi stool granted a lease of 22.07 acres of land at Fafraha (including the plaintiff's land) to the defendants. Both the plaintiff's and defendants' grants were registered. Subsequently, the defendants obtained another grant of the same plot from both OK and "TN," the head of the Agbawe quarter. When a search by the plaintiff at the Lands Department revealed that his land had been plotted in the name of the defendants, he petitioned the Chief Lands Officer. The Chief Lands Officer accordingly had the land re-plotted in the plaintiff's name, deleted the grant to the defendants and informed OK, TN, and the defendants accordingly. Upon the defendants' refusal to vacate the property, the plaintiff sued the defendants for declaration of title to land and damages for trespass. The trial judge gave judgment for the plaintiff. On appeal, the COA held that the attitude of the Lands Department in their unilateral decision to delete the plotting of the land conveyed to the defendants was unjustified, as the procedure laid down by the Land Registry Act 1962 Act (122) for the resolving of conflicting interests was not followed. Consequently, the defendants' conveyance would be deemed to have been registered as from the date it was submitted for registration.

Also, in **Mahama v. Issah et al.**,[41] both parties claimed ownership of a plot of land at Tamale. In an action filed by the plaintiffs at the High Court for declaration of title to the plot, the plaintiffs deposed that they obtained an oral grant of the land from the allodial owner, the Lamashegu-Naa, with the consent of his overlord, Ya-Na. In his defense, the defendant contended that he was the first to obtain a lease on the land from Lamashegu-Naa with the consent and concurrence of the Ya-Na and had the lease stamped and registered. At the trial, an official from the Land Commission testified, without any objection from the defendant, that he had made an oral allocation of the plot in dispute to the plaintiffs. The trial judge gave judgment for the plaintiffs on the ground that by virtue of Section 1(6) of the Land Commission Act of 1971 (Act 362) and Article 163(5) of the Constitution, the Tamale lands were vested in the President and the Lands Commission was the statutory body authorized to grant those lands to the exclusion of any other authority. The defendant appealed and the COA found that when the plaintiffs presented their document for registration, the Lands Commission rejected it on the ground that the defendant's lease in respect of the same land had already been registered. The COA held that the law was well settled under section

[39] Sittie 2006.
[40] (1984-86) 1 GLR at 412.
[41] (2001-2002) 1 GLR at 694.

24(1) of the Land Registry Act of 1963 (Act 122) and said that the holder of a registered document on land acquired better title to that land. Accordingly, judgment was entered for the defendant.

In conclusion, there is a clear divergence between customary and statutory law relating to land in Ghana and there is a need for harmonization of the two systems. It is important for customary law to be incorporated into the mechanisms for public administration of land[42] to provide investor assurance, certainty on land ownership rights in Ghana, and provide a foundation for implementation of REDD+, which intersects with both customary and statutory law.

Finally, it should be noted that under Ghanaian law, a foreigner is not allowed to acquire a freehold interest in land in Ghana. The maximum interest a foreigner is allowed to hold is a leasehold interest for fifty years.[43] In the same vein, a private company registered in Ghana that has foreign equity participation cannot hold an interest in land beyond the same constitutional maximum of fifty years. This is contrary to the ordinary rule that a limited liability company registered in Ghana is a Ghanaian company and therefore a resident. The Supreme Court has taken the view that allowing companies owned by foreigners to have leasehold interest in excess of 50 years will undermine the constitutional provision that prevents foreigners from holding a freehold interest in land in Ghana. Accordingly, government regulators will look to the ownership of the company to prevent a majority-foreign-owned company from holding an interest longer than the constitutional maximum for foreign individuals.

2 Mineral Rights

Most mineral resources in the world are vested in the hands of governments, and Ghana is no exception in this regard. As most minerals are found beneath the earth's surface, government ownership often creates a dual ownership structure where the land itself belongs to an individual, family, stool or community, while the natural resources belong to the government.

In Ghana, ownership of land is separated from ownership of the minerals occurring on the land. Article 257 (6) of the 1992 Constitution provides:

> "[E]very mineral in its natural state in, under or upon any land in Ghana, rivers, streams, water courses throughout Ghana, the exclusive economic zone and any area covered by the territorial sea or continental shelf is the property of the Republic of Ghana and shall be vested in the President on behalf of, and in trust for the people of Ghana."[44]

The Minerals Act 1962 also vests all minerals in Ghana in the President in trust for the people, but preserves the rights of existing concession holders.

Prior to independence, the chief acting in concurrence with the elders of the stool could grant rights to investors in mining development projects on unencumbered stool lands. The chief's fiduciary

[42] Kasanga 2002.
[43] 1992 Constitution Article 266.
[44] Other relevant legislation in this regard are the Concession Act 1962, section 16(4) and the Minerals Act (1962) Act 126, which also provides that all minerals are "… vested in the President in trust for the people of Ghana.

position had the potential of ensuring equitable distribution in the community of each subject's share of the profits from mineral exploitation. However, defects in the customary processes on accountability of revenues accruing from stool lands eventually led to the need for the state to intervene to limit the authority of chiefs in relation to stool lands. Eventually, legislation was enacted to modify this aspect of customary law. The Administration of Lands Act 1962 further reduced the management authority of chiefs over stool lands by providing that stool lands were to be administered by the Minister. Consequently, the power of local people to exercise control over the exploitation of their natural resources through indigenous customary law was lost and gradually ceded to the state.

Despite the state's control over minerals, local communities continue to participate in the revenue from mineral exploitation in their communities via proceeds from the grants of surface rights to mineral rights holders. While the central government grants use of the resources themselves, the stool, family, or community has the power to grant surface rights to the land where the minerals are located. Again, this creates a pluralistic approach in dealing with land and resources.

An equally compelling reason for the intervention of the Ghanaian government to take over the exploitation of mineral resources in Ghana was the need to shield investors from insecurity of title usually arising from conflicting or overlapping claims of stools to title over land. Because all mineral rights are vested in the state, investors are now required to deal only with the government in relation to the grant of subsoil rights, while the surface rights remain vested in the traditional owners (i.e., the usufructuary or allodial title holders). This brings to the fore the necessity for accuracy of title to the lands being registered under the Land Title Registration Law of 1986 and provides a compelling reason why customary law should be harmonized with statutory law.

3 Forest Tenure in Ghana

Forest tenure refers to patterns of access to, and ownership of, forest resources, including non-timber forest products (NTFP) and timber resources such as cane, chewing sticks, fuel wood, pestle and mortar woods and kola and rubber trees, which can be found within and outside forest reserves.[45] Forest types in Ghana include not only reserve and off-reserve, but also communal forests, community plantations, private/individual plantations, and institutional plantations.

3.1 Ownership and Use Rights in Forest Land

In Ghana, forest ownership derived from the system of land inheritance, which takes two forms: patrilineal and matrilineal. As a result of the different historical settings of these two systems, they have different concepts of land, land acquisition, and land ownership. Under the patrilineal system, inheritance passes directly down the male line, while in the matrilineal system succession to rights to property and land passes along the female line according to primogeniture in the following order: brothers, sisters' sons, sisters, and sisters' daughters (Agyeman Dua, 1991).[46]

[45] Amanor 2002.
[46] Boakye and Baffoe 2006.

All forest land in Ghana is managed by the government in trust for the stool landowners.[47] Forest reserves and their natural resources are protected by the state and exploitation of the resources contained in reserves is strictly prohibited. By statute, reserves are managed by the Forest Services Department. In theory, the establishment of forest reserves does not affect land ownership, meaning that although forest reserves are regulated by the government, they are owned by communities represented by their chiefs. In practice, the establishment of forest reserves greatly diminishes the rights of adjoining communities to timber and NTFP by restricting forest access and use.[48]

The management of trees within forest reserves and the rights to own, plant, use, and dispose of trees, are controlled by the State through the Forest Protection Decree of 1974. Outside the reserves, all naturally occurring trees of economic value are vested in the state in trust for the stools.[49]

Four stages can be seen in the evolution of forest resource tenure in Ghana: the pre-colonial era, the colonial period, the post-independence period and the 1990s.

During the pre-colonial era, the extraction of natural resources was not monopolized by the ruling classes, and the peasantry was able to extract resources such as kola, rubber, and ivory. While it was recognized that farms belonged to the farmers, land as part of the political state belonged to the king. Rather than monopolizing the land, however, leaders appropriated a share from resources and revenues. For example, the Akyem Abuakwa Stool Land Declaration of 1931 required one log be paid to the stool for each tree felled on a farm or fallow land.[50]

During the colonial period, in 1927 forestry legislation was enacted which recognized the rights of the chiefs over the land, including their right to grant concessions for timber. The legislation also gave the government a role in constituting, maintaining, and supervising forest reserves and specified that one third of the revenues were to be used by the Forestry Department to improve the reserves. By 1938, nearly 20% of the forest zone was reserved. The 1948 Forest Policy, the first forest policy in Ghana, was established during this period. The main objectives were conservation and protection of the forest environment, management of the permanent forest estate on a sustained yield basis and promotion of research in all aspects of scientific forestry.[51] The introduction, growth, and tremendous success of cocoa as a cash crop within the high-forest zone led to land-use decisions, which impacted forests enormously, while the sustained supply of timber for the wood industry was over-emphasized, leading to overexploitation and collapse of unreserved forests.

The post-independence period entrusted all forest reserves and timber trees, on- or off-reserve, to the President, who was to hold them in trust for the stools.[52] The emphasis during this period was on promoting 'salvage felling' rather than on conservation of forest resources, as evidenced by the 1948 Forest Policy. The 1959 Protected Timber Lands Act was promulgated, which created

[47] Boakye and Baffoe 2006.
[48] FD and IIED 1994.
[49] Section 16(4) Concession Act of 1962 (Act 124); Trees and Timber Decree of 1974 (NRCD 273).
[50] Amanor 1999 at 69.
[51] Kotey et al. 1998.
[52] The Concession Act of 1962.

protected areas subject to restrictions on farming, cutting trees, and settlement, until all valuable species had been logged by timber companies. Once exploitation had finished, forests were then de-reserved and farmers could cultivate them. The Act also enabled the President to cancel any concession held by any person not a citizen of Ghana or any firm not registered or incorporated in Ghana.

A review of case law reveals that the concession licenses granted sometimes had strict conditions attached to them, such as the filing of a certificate of validity, which, if not followed, could cause a loss of the concession rights. Section 32 of the Concessions Ordinance 1939, for example, provided for certificates of validity.

In **Lantei Kofi et al. v. James Colledge (Cocoa) Ltd et al.**,[53] a case involving the validity of the grant of a concession, the plaintiff's company was given a grant of more than 25 acres of land. Under the Concessions Ordinance, the company had to apply for a certificate of validity (concessions of less than 25 acres were exempt from the ordinance). The parties to the agreement executed a document purporting to transfer the land together "with all tree hedges, ditches, fences, ways, passages, water drains, water courses, wood, under-woods, rights, easements and appurtenances whatsoever." The company did not apply for a certificate of validity. Subsequently, timber rights in the same land were granted to the defendants, who obtained a certificate of validity, the plaintiff company not opposing. The defendants then cut timber on the land, and the plaintiff instituted this action. It was held that the plaintiff's grant was null and void.[54]

By the 1990s, the forest reserves had been depleted. With 80% of timber exports originating from off-reserve areas, which lacked controls that would have ensured the sustained management of timber, the off-reserve areas also rapidly became depleted. Increasing demand for forest land for agricultural purposes due to population growth led to clearing of forests for farming, illegal logging, and surface mining, uncontrolled bush fires, collection of fuel wood, and excessive hunting and poaching of wild animals. With advances in science and technology, growing understanding of the ecological importance of forests in terms of genetic biodiversity and wildlife, and the increasing need for popular participation in resource management, it became clear that the 1948 Policy's emphasis on timber and NTFP development was no longer appropriate and was based on an outdated understanding of forest ecosystems.[55] The need for a new forest policy to address degradation and loss of forest cover in Ghana led to the adoption of the 1994 Forest and Wildlife Policy. The aim of the 1994 Policy is the conservation and sustainable development of the nation's forest and wildlife resources to maintain environmental quality and to secure perpetual flow of optimum benefits to all segments of society.

3.2 Ownership and Use Rights in Trees

Trees in Ghana are regarded as a major source of income generation and as such come under close supervision from the government. In terms of ownership and commercial exploitation rights,

[53] (1952-55) Land Cases 45.
[54] See also African Woods Ltd v. Administrator of Stool Lands (1962) GLR 24 and Re. Concession Enquiry No. 471 (Ashanti) Asukese Forest Reserve Timber Concession.
[55] Foreword on Forest and Wildlife Policy 1994.

Ghanaian law makes a distinction between naturally occurring and planted trees. The right to the commercial exploitation of trees, whether naturally occurring or planted in forest reserves, is vested in the state,[56] and it is a statutory offence to harvest without the consent of the state.[57] In off-reserve forests, the right to commercial exploitation of all naturally occurring trees is also vested in the state.[58]

The law pertaining to the right to planted trees was recently changed to encourage afforestation, reforestation, and the development of private plantations.[59] With respect to trees planted off-reserve, with the exception of timber trees, ownership of such trees lie with the planter,[60] who has every right over such trees. Tree owners may fell timber trees for non-economic purposes, such as clearing and burning forested land, or for agricultural purposes.

Previously, the right to commercial exploitation of timber trees, whether naturally occurring or planted, was vested exclusively in the state, and only companies and partnerships that were granted a Timber Utilization Contract (TUC) could fell timber trees on lands to which the Timber Resources Management Act 1997 applied.[61] This applied to all lands except lands subject to alienation holdings, lands with farms, lands with forest plantation and lands with timber grown or owned by any individual or group of individuals. With regard to these exceptions, prior authorization from the individual, group or owner concerned was required before harvesting could begin.[62] Presently, by virtue of an amendment introduced in 2002 by the Timber Resources Management (Amendment) Act, Section 4(3) introduces the concept of private forest plantations and expressly prohibits the grant of TUCs to lands with private forest plantations and land with timber grown or owned by any individual or group of individuals.[63] In essence, this means that ownership of planted timber trees in off-reserve forests is now vested in the planter/owner, who can exercise ownership rights including the right to commercially exploit the timber trees without the need to seek governmental permits. This is buttressed by Section 3(3) of the Forest Plantation Development Fund Act 2000,[64] which provides that a beneficiary of the fund who observes the conditions set by the board is entitled to exercise rights of ownership over any timber produced.

The distinction between naturally occurring trees and planted trees is further reflected in the way the revenue from the exploitation of natural resources is shared between beneficiaries. Revenue from naturally occurring trees is shared between the state and the beneficiaries listed in Article 267(6) in the manner provided therein. However, currently, under a special arrangement between the Forestry Commission and the Office of the Administrator of Stool Lands (OASL), the stumpage collection

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[56] Section 16(4) of the Concession Act of 1962 (Act 124).
[57] Timber Resource Management Act of 1997 (Act 547).
[58] Section 16(4) of the Concession Act of 1962 (Act 124).
[59] Section 4(3) of the Timber Resources Management Act of 1997, as amended by the Timber Resources Management (Amendment) Act of 2002.
[60] A planter may be the landowner, sharecropper or lessee of the area.
[61] Sections 1 and 2 of the Timber Resources Management Act of 1997. The Economic Plants Protection Act of 1979 prohibits the grant of felling rights to trees situated in farms containing economic plants.
[62] Section 4 of the Timber Resources Management Act of 1997.
[63] Section 1 of the Timber Resources Management (Amendment) Act of 2002.
[64] An act to establish a Forest Plantation Development Fund to provide financial assistance for the development of private commercial forest plantations.

and disbursement functions have been ceded to the Forestry Commission. The Forestry Commission is authorized to retain a portion of the stumpage as management fee. The existing scope of stumpage disbursement stipulates that after the 10% administrative fee for the OASL has been deducted, the remaining stumpage shall be shared in a fifty-fifty ratio between the Forestry Commission for its management fee and the other stakeholders listed in Article 267(6) of the Constitution.[65] The 50% to remaining stakeholders is shared as provided in Article 267(6). Off-reserve, the revenue is also split fifty-fifty between the Forestry Commission and the beneficiaries in Article 267(6) of the Constitution. However, revenue from harvesting planted trees is generally shared between the owners and the state in a ratio of 90:10,[66] while the Modified Taungya System has a different benefit-sharing structure.[67]

The problem with the existing benefit-sharing arrangement is that tree tenure in Ghana has been addressed without confronting the existing laws enshrined in the 1992 Constitution, recognizing the rights of the chiefs, district assemblies, and traditional authorities to revenue from timber trees, but not the rights of the key stakeholders such as the farmers who tend the land and the forest – dependent communities whose cooperation is critical in the effort to reduce deforestation and degradation.[68] The law does not recognize them as beneficiaries, nor are they entitled to revenue from harvesting. In the case of the farmers in off-reserve forests, the stool is technically required to consult them when concessions over the trees on their farms are granted to third, yet this consultation rarely happens. Timber contractors are supposed to pay compensation to farmers for damage done to the farm during logging, but compensation figures have not been reviewed since 1979 despite inflation and devaluation of the Cedi. Moreover, since there were no explicit procedures for timber extraction on farms and compensation claims, contractors, particularly those with influential connections, often evade compensation. In contrast, farmers are poorly organized and have few channels for articulating their grievances. As a result of the encroachment of timber contractors onto farmlands, many farmers have taken to destroying all timber trees on their farms in order to prevent unwanted harassment. However, although farmers and forest-dependent communities are neither recognized as beneficiaries in the sharing formula under Article 267(6), nor are they entitled to revenue from harvesting, their customary rights are technically preserved under the law and the courts have always upheld their right to compensation in the event of damage done to their farm by concessionaires.

In the case of **Kwadwo v. Sono**,[69] a case dealing with Section 16(4) of the Concessions Act, a timber concession agreement between "K" and the government required K to compensate owners of any fruit-bearing or cocoa trees damaged as a result of activities under the timber concession; the amount of compensation payable was to be determined by the Administrator of Stool Lands. "S" sued K for damages arising from disturbance to 11.68 acres and destruction of 5,067 cocoa trees as a

[65] Forestry Commission of Ghana 2009.
[66] Osafo 2010.
[67] Agyeman et al. 2003. In the Modified Taungya System, the State and the farmers each get 40% of timber revenue, while landowners receive 15% (7% to traditional authorities and 8% to tribal landowners) and forest-adjacent communities receive 5%. However, while this sharing formula has been approved by the government, specific enabling legislation has yet to be passed.
[68] Amanor 2002, Osafo 2010.
[69] (1984-86) 1 GLR at 7.

result of K's operations in 1977. The trial judge rejected the compensation rate fixed by the Chief Lands Officer on the ground that it was unreasonably low. K appealed on the grounds that by the provisions of the Concessions Act, 1962, sections 16(4) and (5), the grant to K under the concession agreement extinguished the rights and interests of the local farmers save what had been reserved under the concession agreement. On a further appeal, the COA unanimously dismissed the appeal, holding that K's right of precedence did not in any way abridge S's legal rights to the protection of, and compensation for, his crops. S's customary rights were preserved because they were rights of the subjects, which could not be alienated by the stool for which the President acted. S's redress for damage to his crops was based on his common law rights against an infringement of his proprietary interests.

Also in **Gilksten (W.A.) Ltd v. Appiah**,[70] a case dealing with the Concessions Ordinance of 1939 (Cap 136),[71] the respondent sued the appellants for causing extensive devastation to the respondent's farms. The activities responsible for causing damage to respondent's farm were carried out without the respondent's permission, but were within the scope and geographical area of appellants' valid concession. The High Court awarded damages based on the acreage of trees destroyed. Both parties appealed. Allowing both appeals, the COA held that the Concessions Ordinance was so sweeping in its conferment of rights on a concessionaire that, absent fraud, his title was good against the whole world and took precedence over the holder of customary rights. Only such rights as were preserved by the law or in the concession agreement would continue as against the concessionaire. Because this particular concession contained the usual provision for the protection of customary rights, the respondent must be compensated for the actual destruction of any economically-valuable trees that he had cultivated in pursuance of his protected rights.

4 Rights to Stored Carbon and Carbon Credits

Carbon is a naturally occurring element that flows between the atmosphere and terrestrial ecosystems. Because carbon in the atmosphere contributes to climate change, carbon sequestration in terrestrial ecosystems is a valuable ecosystem service. Terrestrial carbon sinks are not permanent because when trees are felled or when the soil is substantially disrupted, carbon is emitted back into the atmosphere. Yet, forests perform a valuable service in storing and capturing carbon, and carbon sequestration by forests is potentially a major mitigation option for REDD+. Therefore, under the evolving climate change framework for REDD+, finding ways to ensure permanent land use changes is a major issue.

There is presently no Ghanaian legislation which pertains directly to carbon, meaning that the ownership and exploitation rights cannot be stated with any level of certainty. It is instructive to look at the existing precedents for minerals and other natural resources. In Ghana, mineral resources are vested with the President, who holds them in trust for the people. Accordingly, if carbon were to be classified similarly, ownership and exploitation rights will be vested exclusively in the state, and this could severely limit communities' access to REDD+ incentives. There will be no incentive for local people to keep forests standing unless the benefits from REDD+ are equitably shared between

[70] (1967) GLR 447.
[71] The predecessor to the Concessions Act of 1962.

the state and key stakeholders such as the farmers and the host communities. If the law provides guidelines for clear and equitable benefit sharing, the issue of ownership of carbon may lose its central importance.

Alternatively, the government may choose to treat carbon as an ecosystem service, in which case payment will be required for the services provided by the forests and trees that are acting as carbon sinks. Ownership rights in such a case will likely be determined by whether the relevant trees are naturally occurring or planted, amongst other factors.

Carbon ownership rights may also be tied to land ownership, in which case exploitation rights would be vested in the stool, family, or individual who owns the land. This scenario would be the most favorable for a REDD+ project because it provides economic incentives to keep the forests standing directly with the key stakeholders. However, with no role for the government, it is unlikely to prevail.

Whatever classification is used, there is a need for legislation that ensures effective benefit sharing system that involves key stakeholders in the management of their resources and ensures equitable distribution of REDD+ benefits through a collaborative approach involving communities and traditional leadership.

5 Necessity for Cross-Sector Engagement

The ability of REDD+ to effect land use change depends not only on the existence of good forest policies, but also on effective implementation and on cross-sector coordination.[72] Implementation is a major hurdle in Ghana, as it is elsewhere in Africa, as resources are often lacking to transform policy into practice, much less to harmonize policy across the multiple sectors that are relevant for REDD+. The most relevant sectors in terms of deforestation and forest degradation impacts are agriculture, mining, energy, and infrastructure. Yet, policy in these areas often conflicts directly with REDD+

In Ghana, major forest degradation drivers come from the agricultural and infrastructure development.[73] Yet, the government continues to promote these forms of development, while simultaneously working towards REDD+ implementation. To ensure that the government is not working at cross-purposes with itself, there is a pressing need for relevant government departments to develop coherent inter-sectoral planning and policy formation.

III Collaborative Natural Resource Management Approaches

It is important, both for efficacy and equity reasons, that REDD+ decision making involves local people, who should receive a major share of incentives for forest conservation and restoration. Structures for collaborative natural resource management are therefore vital for REDD+

The 1994 Forest and Wildlife policy promotes collaborative management of forest resources with rural or forest-based communities in Ghana. Collaboration was described by the then-Forestry

[72] Cotula and Mayers 2009.
[73] Asare 2010.

Department of the Forestry Commission as any form of interaction between local people and the Forestry Department which enhances management of the resource and improves the flow of benefits to local people. Some of the compelling factors which led to the emergence of collaboration include:

- Insufficient Forestry Commission personnel to adequately police the forests against illegal loggers;
- Genuine concern about the erosion of the rights of local communities; and
- Growing international support for community-based natural resources control.

Community Resource Management Areas (CREMAs) emerged as the primary institutional mechanism being utilized by the government for implementing collaborative wildlife management outside protected areas in Ghana. Potentially, CREMAs could provide an apt institutional framework for REDD+ projects that effectively engage local people and facilitate equitable benefit sharing. This part analyzes CREMAs and their use for REDD+.

1 Community Resource Management Areas in Ghana

A CREMA is a geographically defined area that includes one or more communities that have agreed to manage natural resources in a sustainable manner. Its management structure is composed of a CREMA Executive Committee and a Community Resource Management Committee (CRMC). The CRMC is the local unit of the organization and is formed at the level of each community, while the Executive Committee formed out of the CRMC acts as the operational part of the organization. Each CREMA has a Certificate of Devolution (COD), granted by the Minister of Lands and Forestry,[74] that devolves authority for management and utilization of wildlife to the Executive Committee. Individual farmers or landholders are members of the CREMA and, through the CRMC, they determine the policies of the CREMA and hold the Executive Committee accountable.

Each CREMA has a constitution and bylaws that guide and regulate the activities of the CREMA. CREMA revenues are shared between the members, with 5-10% usually going to the Executive Committee and the remainder allocated to the communities for developmental purposes.

There is presently no legislation that provides specifically for the establishment of CREMAs in Ghana. Rather, CREMAs came out of the general terms of the Forest and Wildlife Policy of 1994 and the 2000 Collaborative Wildlife Management Policy of the Wildlife Division of the Forestry Commission. However, the Government of Ghana is now working to pass legislation that will create a legal framework for CREMAs.

While the concept of involving communities in natural resource management and conservation is not new in Ghana, the CREMA approach provides for the first significant transfer of management

[74] Certificate of Devolution is granted pursuant to section 1 of the Wild Animals Preservation Act 43 of 1961, which provides: "The Minister, may from time to time appoint honorary Game Officers by name or as holding an office to carry out all or any of the purposes of this act, or do anything required by this act to be done a Game Officer." The Executive Director of the Forestry Commission's Wildlife Division recommends the grant of a COD.

authority to community-based organizations.[75] CREMAs have been primarily developed for wildlife management, sustainable harvesting of non-timber forest products, and ecotourism development, but they are also potentially well-suited to other areas of natural resources management.[76] Presently, Ghana has between 18 and 20 CREMAs, including about 14 CREMAs in western Ghana, 3 in the north, and one in the northwest, most of the CREMAs are located close to Protected Areas.[77] Many more are in development.

2 CREMAs and REDD+ Projects

The objectives of a CREMA relating to conservation and sustainable management of natural resources are compatible with the objectives of REDD+. For example, the Collaborative Wildlife Management Policy of 2000, which helped give rise to CREMAs, advocates devolving management authority to representative community institutions to create incentives for sustainable management of natural resources at the community level. Similarly, REDD+ depends upon providing incentives for sustainable natural resource use and management to local people who are actually responsible for the day-to-day use and management of their natural resources.

Whether a CREMA provides an apt institutional framework for REDD+, however, depends upon additional factors, such as whether a CREMA is an effective legal structure for ensuring that individuals, families, traditional authorities and/or communities involved in REDD+ projects are entitled to manage their resources to minimize carbon emissions and maximize carbon storage and eligible to receive REDD+ benefits from their activities.

It is important to determine whether local people and communities involved in a REDD+ project within a CREMA are entitled not only to undertake REDD+ project activities, but also to receive REDD+ incentives. However, the absence of a formal legal framework for CREMAs makes a definitive answer impossible. CREMAs do not derive their existence or structure from the Constitution or any law, although legislation on CREMAs is pending. Existing laws on lands and forestry neither provide expressly for the creation of CREMAs nor vest them with rights under the law to carry out defined activities. Therefore as a legal entity, a CREMA is not directly recognized in the same manner that a company or association incorporated under the laws of Ghana is recognized.

Furthermore, the enabling legislation under which the Minister of Lands and Forestry purports to grant authority over wildlife management to a CREMA (via a COD) only vests the Minister with powers to appoint honorary game officers.[78] It does not give the Minister the power to create CREMAs for wildlife management. Game officers have specific, legally-defined functions related to the protection and preservation of animals, whereas a CREMA's functions are broader, often including the protection and preservation of animals among other things. In fact, because the Minister's power to appoint honorary game officers is so specific (and does not refer to anything like a CREMA), it can be argued that it is contrary to the intention of Parliament that it be extended in

[75] Forestry Commission of Ghana 2004.
[76] Forestry Commission of Ghana, Wildlife Division 2004.
[77] Interview with Nana Adu-Nsiah, Executive Director, Forestry Commission, Ghana (May 2011).
[78] Section 1 of the Wild Animals Preservation Act of 1961.

this way. As the argument goes, if Parliament had intended to grant the Minister power to create CREMAs, it would have done so expressly.

Fundamentally, the legal personality of an entity such as a CREMA cannot be derived solely from a government policy (the Collaborative Wildlife Management Policy of 2000) and a COD issued via ministerial consent, without explicit legislative authority. Consequently, the legal validity of a CREMA as a vehicle for rights and benefits of individual members is open to challenge. While individual members remain able to exercise rights and perform obligations relating to the management and enjoyment of natural resources, unless the CREMA is not additionally registered as a legal entity (such as a company), the collective cannot sue to enforce rights or be sued on obligations to members or third parties.

However, existing structural features of CREMAs could easily fit into existing corporate forms under Ghanaian law. CREMAs can be registered as cooperatives, community-based organizations, companies limited by guarantee or limited or unlimited companies. In other words, nothing prevents CREMAs from being created and registered as legal (corporate) entities under Ghanaian law. Once registered and endowed with legal personality, they can serve as effective structures for the conferment of rights and benefits on individuals and communities entitled to manage their resources in order to minimize carbon emissions and maximize carbon storage and to receive REDD+ benefits from their activities.

The legal basis for the allocation of carbon rights and benefits in a CREMA will depend upon how carbon is categorized under Ghanaian law. If carbon rights are recognized as property rights that are derived directly or indirectly from land rights, they are protected by the Constitution. Insofar as carbon rights are tied to carbon sequestered in clearly delineated forest lands owned by local communities, those that own the land are entitled to carbon rights, and benefits and royalties accruing to communities will be shared according to the formula provided under Article 267(6).[79]

However, if carbon is treated as an ecosystem service, the sharing formula in respect of naturally occurring and planted trees is a potential option. Another likely possibility is that Parliament will devise an entirely new regime for the allocation of carbon rights and benefits. The danger is that as long as there is no legislation stating explicitly what the benefit-sharing formula is, when revenue begins to flow from a REDD+ project, the government could seek to modify the sharing ratio to suit its purposes.

If there is no legislation on carbon and no benefit-sharing formula provided under the law, as is now the case in Ghana, the right to receive REDD+ benefits will depend on what is agreed between the parties involved. Therefore, if a CREMA is properly registered under Ghanaian law, the relevant document would be the constitution or any other similar document agreed between the members, as well as any contractual documents used for a REDD+ project. Rights and obligations of individual CREMA members with respect to REDD+ should be clearly defined in these documents. So, if a CREMA is to be utilized specifically for a REDD+ project, this goal should be clearly stated in the constitution of the CREMA. However, whatever is agreed between the members will be subject to

[79] 1992 Constitution.

the future passage of specific legislation governing carbon rights and benefits, which, in the meantime, creates uncertainty for REDD+.

3 Formal Structures for REDD+ Benefit Distribution in a CREMA

Because CREMAs are not themselves legally recognized entities, stakeholders may wish to organize a CREMA into a fiduciary trust, company, or other formal, legally-recognized organizational structure.

Fiduciary trust funds for REDD+ could be created in a manner similar to customary trust, whereby carbon would be held in trust for the community by the chief who will then be accountable to the community for any financial benefits that accrue. For example, the Nature Conservation Research Centre (NCRC) has established 13 trust funds linked to CREMAs with targeted objectives, and there is also a trust fund linked to Kakum National Park.

Alternatively, an organization such as a CREMA could be incorporated as a trust under the Trustee (Incorporation) Act (106) of 1962. However, trusts incorporated under Act 106 have very narrowly defined goals such as religious, charitable, and social purposes. Consequently, economic benefits to individuals may be difficult to justify under such a trust and the trustees may be liable if they act outside the narrowly defined purposes of the statute.

A similar potential arrangement is for a CREMA to be registered as a Company Limited by Guarantee, with a clear set of objectives in line with management of a given landscape to return REDD+ dividends to members. However, as with a trust under Act 106, a Company Limited by Guarantee must operate as a charity, and its members may not receive profits from operations. Rather, profits must be reinvested towards the company's objectives. As a result, dividend payments may be difficult to justify, and the trustees of the company may be liable for breach of trust if they act outside of the narrowly defined purposes of the statute. Therefore, if either a trust or a Company Limited by Guarantee is used, it must be carefully structured to avoid conflict with the law.

A third option that may provide more straightforward opportunities for paying REDD+ dividends to members is for the organization to be registered as a trust under Act 106, while the part of the organization that will engage in profit-making activities is registered as a limited liability company. An example of this structure in practice is the Kuapa Kokoo cooperative.

IV Conclusion

For REDD+ to be successfully implemented in Ghana, participatory management of the forest estate involving forest fringe communities is needed. Successful implementation will require further review of relevant laws and policies in Ghana and, potentially, legislative reform. For example, as highlighted in this paper, current legislation vests in the state all naturally occurring timber trees whether in reserves or off-reserve. This ownership structure creates perverse incentives for farmers and forest communities to destroy timber trees that bring them no benefits and merely creates the risk that timber concession-holders will damage land or crops in the course of logging activities.

There is no doubt that the 1994 Forest and Wildlife Policy, which advocates a collaborative approach (and is the source of the CREMA structure), is a step in the right direction. Yet, there is a lot to be accomplished in terms of the legislative framework. While, the CREMA concept appears to be relevant for REDD+, it is at present not a legally-recognized entity. In this regard, a detailed framework on CREMAs, carbon ownership and transfer rights, and other issues relating to implementation of REDD+ are urgently required for investor assurance. In addition, clarity over land, forest, and tree tenure will be very important. Lastly, it would be beneficial if the Government of Ghana ensures prompt passage of the proposed Forestry Bill, which seeks to consolidate all forestry and wildlife laws in Ghana, to inspire investor and stakeholder confidence in the REDD+ activities in Ghana.

Bibliography

Agyeman, V.K., Marfo, K.A., Kasanga, K.R., Danso, E., Asare, A.B., Yeboah, O.M., and Agyeman, F. 2003. *Revising the Taungya Plantation System: New Revenue-Sharing Proposals from Ghana*. 212 Unasylva 40-43.

Amanor, K. 2002. *Shifting Tradition – Forest Resource Tenure in Ghana*. Pp 48-60 in The Dynamics of Resource Tenure in West Africa, Delville, P., Toulmin, C., and Traore S. eds. IIED, London, UK.

Amanor, K. 1999. *Global Restructuring and Land Rights in Ghana – Forest Food Chains, Timber and Rural Livelihoods*. Research Report No. 108 from the Political and Social Context of Structural Adjustment in Africa. Nordiska Afrikainstitutet, Uppsala, Sweden.

Asare, R.A. 2010. *Implications of the Legal and Policy Framework for Tree and Forest Carbon in Ghana: REDD Opportunities Scoping Exercise*. Forest Trends, Washington, DC.

Boakye, K.A. and Baffoe, A.B. 2006. *Trends in Forest Ownership, Forest Resource Tenure and Institutional Arrangements: a Case Study from Ghana*. Forestry Policy and Institutions Working Paper No. 19, pp. 151-174 in Understanding Forest Tenure in Africa: Opportunities and Challenges for Forest Tenure Diversification. FAO, Rome, Italy.

Boon, E., Ahenkan, A., and Baduon, B.N. 2009. *An Assessment of Forest Resources Policy and Management in Ghana*. Conference Proceedings from the 29th Annual Conference of the International Association for Impact Assessment, 16-22 May 2009, Accra, Ghana.

Cotula, L. and Mayers, J. 2009. *Tenure in REDD – Start-point or afterthought?* Natural Resource Issues No. 15. International Institute for Environment and Development. London, UK.

Council of the European Union. 2009. Voluntary Partnership Agreement signed 20 November 2009 between the European Community and the Republic of Ghana on forest law enforcement, governance and trade in timber products into the Community.

Council of the European Union. 2005. Council Regulation (EC) No. 2173/2005 of 20 December 2005 on the establishment of a FLEGT licensing scheme for imports of timber into the European Community.

Food and Agriculture Organization of the United Nations (FAO). 2011. *State of World's Forests 2011*. FAO, Rome, Italy.

Food and Agriculture Organization of the United Nations (FAO). 2001. *Forestry Outlook Study for Africa (FOSA) Ghana, 2nd Draft*. FAO, Rome, Italy.

Forestry Commission of Ghana. 2010. *Revised Readiness Preparation Proposal (R-PP)*. Submitted to the FCPF 23 Dec. 2010.

Forestry Commission of Ghana 2009. *New Procedures for Stumpage Collection and Disbursement*. Accra, Ghana.

Forestry Commission of Ghana. 2004. *A Brief Guide to the Establishment of Community Resource Management Areas (CREMAs)*. Accra, Ghana.

Forestry Commission of Ghana. 1994. Forest and Wildlife Policy, 1994. Accra, Ghana.

Forestry Commission of Ghana, Wildlife Division. 2004. *A Briefing Document on Collaborative Resource Management in Ghana*. Accra, Ghana.

Forestry Department of Ghana (FD) and International Institute for Environment and Development (IIED). 1994. *Study of Incentives for the Sustainable Management of the Tropical High Forest of Ghana. Final Report*. FD, Accra, Ghana and IIED, London, UK.

IPCC. 2007. *Climate Change 2007: Synthesis Report, part of the 4th Assessment Report of the Intergovernmental Panel on Climate Change (IPCC)*. Geneva, Switzerland.

Kasanga, K. 2002. *Land Tenure, Resource Access, and Decentralisation in Ghana*. Pp 25-36 in The Dynamics of Resource Tenure in West Africa 2002, Toulmin, C., Delville, P.L., and Traoré, S. eds. International Institute for Environment and Development, London.

Kotey, N.A. Francois, J., Owusu, J.G.K., Yeboah, R., Amanor, K.S., and Antwi, L. 1998. *Falling Into Place: Policy that Works for Forests and People No. 4*. International Institute for Environment and Development, London.

Mabogunje, A.L. 1992. *Perspectives on Urban Land and Urban Management Policies in Sub-Saharan Africa*. African Technical Department Series No. 196. World Bank, Washington, D.C.

Osafo, Y. 2010. *A review of tree tenure and land rights in Ghana and their implications for carbon right in a national REDD+ scheme*. REDD-net.

Sittie, R. 2006. *Land Title Registration, the Ghanaian Experience*. Conference Proceedings from the 23rd International Federation of Surveyors Congress, October 8-13, 2006, Munich, Germany.

United Nations General Assembly. 2007. Non-legally binding instrument on all types of forests, A/c.2/62/L.5. 22 Geneva, Switzerland.

UNFCCC. 2008. *Bali Action Plan, Decision 1 of the thirteenth Conference of the Parties, held in Bali from 3 to 15 December 2007*. United Nations Framework Convention on Climate Change (UNFCCC), Geneva, Switzerland.

UNFCCC. 2009. *Report of the Conference of the Parties on its fifteenth session, held in Copenhagen from 7 to 19 December 2009*. United Nations Framework Convention on Climate Change (UNFCCC), Geneva, Switzerland, 43pp.

UNFCCC. 2011. *Report of the Conference of the Parties on its sixteenth session, held in Cancun from 29 November to 10 December 2010*. United Nations Framework Convention on Climate Change (UNFCCC), Geneva, Switzerland.

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