Benefit Sharing Mechanism for REDD+ Implementation in Ghana

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Cover page photo: Farmer discussing issues of benefit sharing with a researcher in a cocoa plantation
***Photo credit**: William K. Dumenu*

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ACRONYMS AND ABBREVIATIONS

CREMA	Community Resource Management Area
CSIR	Council for Scientific and Industrial Research
DA	District Assembly
DACF	District Assembly Common Fund
DIB	District Implementation Body
FC	Forestry Commission
FLEGT	Forest Law Enforcement, Governance and Trade
FORIG	Forestry Research Institute of Ghana
GETFUND	Ghana Education Trust Fund
GNTF	Ghana National Trust Fund
GSBA	Globally Significant Biodiversity Area
IMAG	Independent Monitoring and Audit Group
IUCN	International Union for Nature and Conservation
MDF	Mineral Development Fund
MGB	Multi-stakeholder Governing Body
MTS	Modified Taungya System
OASL	Office of the Administrator of Stool Lands
PIB	Project Implementation Body
REDD	Reducing Emissions from Deforestation and Forest Degradation
REDD+	Reducing Emissions from Deforestation and Forest Degradation including the role of conservation & sustainable management of forests
R-PP	REDD+ Readiness Preparation Proposal
TA	Traditional Authority
VPA	Voluntary Partnership Agreement

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EXECUTIVE SUMMARY

Reducing Emissions from Deforestation and Forest Degradation including the role of conservation and sustainable management of forests (REDD+) is an effort to offer incentives for developing countries to reduce emissions from forested lands and invest in low-carbon paths to sustainable development. REDD+ activities do not only contribute to emissions reductions, but also bring about financial and other co-benefits which need to be distributed across a wide range of stakeholders linked to deforestation and degradation, sustainable forest management and forest regeneration. Benefit sharing in REDD+ context entails agreements between stakeholders about the distribution of monetary and non-monetary benefits from the commercialization of forest carbon. Benefit sharing creates effective incentives by rewarding individuals, communities, organizations and businesses for actions that change unsustainable land-uses practices and reduce emissions. Moreover, it builds a wider legitimacy and support for the REDD+ mechanism.

Ghana's REDD+ Readiness Preparation Proposal (R-PP) emphasizes among others equitable benefit sharing as a critical component in the preparation toward effective REDD+ implementation. The challenges facing Ghana in developing an effective, efficient and equitable benefit sharing mechanism for REDD+ are those that relate to land/tree tenure, carbon rights definition, determination of benefit distribution mechanism, management of the benefit sharing process (transparency and accountability), determination of beneficiary stakeholders and dispute/conflict resolution mechanism. To address these issues, CSIR-Forestry Research Institute of Ghana (CSIR-FORIG) was commissioned by the Forestry Commission of Ghana to undertake a study with the goal of providing recommendations to address issues of land/tree tenure, carbon rights and benefit sharing critical for the implementation of REDD+ in Ghana. Two main approaches were adopted for executing the study namely: desk and field studies. Information gathered were synthesized for the production of the report.

This report presents the results of the study through a three-part format. Part 1 provides a review of current benefit sharing arrangement in Ghana's forest sector and its implication for REDD+. It also deals with tenure and carbon rights and assesses the inter-linkage between carbon rights and land/tree tenure. It further discusses the lessons and experiences from voluntary partnership agreement (VPA) process, the mining sector and management of local development funds. Part 2 synthesizes results of the desk and field studies and proposes recommendations for addressing issues of land/tree tenure, derived and carbon rights and benefit sharing mechanism (institutional arrangements, benefit sharing models) for REDD+ implementation. It also discusses issues of elite capture, conflicts, safeguards and framework for addressing them. Finally, part 3 presents key governance gaps and recommendations for effective implementation of REDD+ in Ghana.

Review of existing benefit sharing mechanisms

There are four different forms of benefit sharing arrangements in Ghana's forest sector. These include; Constitutional Timber Revenue benefit sharing, Modified Taungya System benefit sharing, Commercial Plantation benefit sharing and Community Resource Management Area (CREMA) benefit sharing. Other forms of benefit sharing arrangements exist in the agricultural sector referred to as Traditional

share contract (sharecropping/land sharing) benefit sharing namely, *Abunu* and *Abusa*.

Land /tree tenure, derived and carbon rights in Ghana

Ghana's land tenure regime is complex and legally pluralistic. It is such that land is owned by one entity but ownership and access to some resources such as trees are held by another entity. Also, both customary and statutory laws govern land tenure in Ghana. Nonetheless, all forestlands in Ghana (except those under private plantation) are managed by the State in trust for the Stool landowners. In terms of tree tenure, there are differences in tenure governing naturally occurring trees and planted trees. For instance, in relation to planted trees, the planter holds exclusive rights over the trees (access, withdrawal, management, alienation, exclusion). Unlike planted trees, rights over naturally occurring trees whether in forest reserves or areas outside forest reserves are vested in the State on behalf of the Stools. The implication is that, the state exercises the full range of rights (access, management, withdrawal, alienation and exclusion) over naturally occurring timber trees. Farmers (and by extension local communities) on whose land these trees occur have only access right, unrecognized management right, *de jure* exclusion right and withdrawal right in the form of timber utilization permit. The legally pluralistic governance system governing land tenure in Ghana and the vesting of naturally occurring timber trees in the State pose some difficulties for REDD+ implementation. For effective implementation of REDD+, land and tree ownership should be aligned while harmonization or legal integration of the two land tenure regimes (customary and statutory) is pursued. The existing tree tenure should be reformed such that ownership of naturally occurring timber trees are vested in persons or entities with management, exclusion and alienation rights to trees and land.

There is a category of stakeholder whose activities are critical to the implementation of REDD+ in Ghana. These are *tenant farmers* and *sharecroppers* in off-reserve areas. Tenant farming and sharecropping are means to gain access to land for farming. Tenant farmers/sharecroppers do not exercise full range of property rights like their respective landowners unless their land holdings were acquired through outright purchase. Rather, they exercise *derived rights or secondary rights* as a result of their tenancy or contract. This form of right may extend to trees they plant or to naturally occurring trees they manage on the land on which they have occupancy. In customary land tenure system, it is largely perceived that planting of trees is a means to gaining access to land or extending one's stay on the land. Granted, landowners may usually resist the planting of trees on their lands by tenant farmers or sharecroppers since it gives an indication of their desire to stay longer on the property. The situation raises the need to incentivize tenant farmers, sharecroppers and landowners to buy into forest conservation activities that inure to REDD+. To address the challenges that *derived right* holders (tenant farmers and sharecroppers) face in the implementation of REDD+, there should be strive toward legal documentation of tenancy or contract between tenant farmer/sharecropper and the landowner. The agreement should acknowledge the derived rights of the tenant or sharecropper and stipulates the formula for sharing REDD+ benefits between the landowner and the tenant farmer/sharecropper. The same would apply to benefits that accrue from existing trees maintained by a tenant farmer or sharecropper. This recommended approach would work out well if carbon rights were tied to bundle of rights (management, exclusion and alienation) exercised over trees or land.

The role of forests in climate change mitigation has brought about a new form of property right - carbon rights. Delineation of carbon right is not only critical for carbon trading but also important for sharing REDD+ benefits. Although, there is no legislation in Ghana that defines and allocates rights to carbon, existing legislations governing rights to natural resources (minerals and timber) provide indications of how carbon rights could be considered in relation to land and tree tenure. In Ghana, mineral resources and naturally occurring timber trees are vested in the President (i.e. State), who holds them in trust for the people. Accordingly, if carbon is considered as a naturally occurring economic resources tied to the sinks (i.e. trees and soil) then carbon would be treated as mineral or naturally occurring timber tree. Hence, ownership would be conferred on the landowner (Stools/Skins, families or individuals) but the right to commercially exploit carbon would be vested in State. However, there would be the need for a legislative instrument to clearly stipulate that for legal reasons. On the other hand if forest carbon is considered as an ecosystem service, implying that *sequestered carbon* is a property separable from the tree or biomass in which it is stored, then there is no precedent for it in the laws governing natural resources in Ghana. Defining carbon as *sequestered carbon* would require a new legislative framework. It is noteworthy that the determination of who owns carbon at the local level is irrelevant if Ghana decides to take a 'national approach' toward the implementation of REDD+. Nonetheless, Ghana's adoption of the nested approach to REDD+ implementation makes it important to define carbon right now. Consistent with the proposed tree tenure reform where ownership of naturally occurring timber trees are vested in persons or entities with management, exclusion and alienation rights to trees and land, carbon should be defined as tied to sinks (trees, soil or land). Consequently, persons or entities that exercise the aforementioned range of rights would be vested with carbon right.

Proposed REDD+ benefit sharing mechanism and its institutional framework

Benefit sharing mechanisms involve a variety of institutional means, governance structures and instruments for distributing finance and other benefits. The various institutions to deliver and manage REDD+ benefits under the proposed REDD+ benefit sharing mechanism include: *Multi-stakeholder Governing Body (MGB); Project Implementation Body (PIB); Independent Monitoring and Audit Group (IMAG); National Carbon Fund* and *REDD+ Registry.* The broad institutional set-up fashioned after a *nested approach* and description of role/functions and proposed membership of the institutions are proposed to guide the establishment of a benefit sharing mechanism for REDD+ implementation in Ghana.

National level program (National approach)

Funds received from international REDD+ funding or carbon payments received from carbon markets would be deposited into the *National Carbon Fund*. Subsequently, specified payments to respective districts participating in REDD+ projects whose payments are received would be made available to the respective *Project Implementation Body (PIB)* operating at the district level. Upon receipt, the PIB would access the funds and make subsequent payment to communities and individuals based on the approved benefit sharing scheme for the respective projects. The PIBs would submit reports (technical and financial) to the MGB and IMAG for auditing. Also, relevant information on carbon emissions and transactions would be logged into the *Carbon Registry.* Information from the Registry would be accessible to MGB and IMAG.

Project level (Sub-national approach)
Under sub-national approach, revenue received from carbon markets would not be deposited into the National Carbon Fund but distribute directly to communities and individuals based on the agreed benefit sharing scheme(s) that applies to the project. However, as a safeguard for the two parties, the developer would submit information (technical and financial) to the PIB coordinating REDD+ activities in the project areas. Such information would be accessible to the MGB and IMAG. This is to ensure adherence to the terms of agreement or contract, rules of engagement, dispute resolution and adherence to standards in the conduct of REDD+ projects with communities or individuals.

Benefit sharing models for REDD+
Three existing benefit sharing schemes and a fund-based benefit sharing scheme were recommended for adoption for REDD+ implementation. The existing benefit sharing models include CREMA, MTS and Commercial forest plantation development benefit sharing. These benefit sharing models address elements of equity, effectiveness, co-benefits and safeguard measures that can support REDD+ benefit sharing mechanism. For instance, the models strive at equity by allocating benefits to all relevant actors contributing to forest management and conservation. Also, they have demonstrated effectiveness by incentivizing participating actors to reduce deforestation and forest degradation. Under CREMA, actors have contributed to forest management and conservation by refraining from activities that contribute to forest degradation and deforestation such as farming and engagement in illegal logging in forest reserves and protected areas.

Under MTS and Commercial forest plantation development models, degraded forest reserves are being restored by stakeholders (particularly famers). Community revolving fund as a fund-based benefit sharing scheme has the potential to support participating stakeholders in planting and maintenance of trees and to enable beneficiaries to engage in economically viable income generating activities.

REDD+ conflicts/disputes and resolution mechanism
The potential of REDD+ funding to increase the value of standing forests may fuel already on-going conflicts over land ownership in forest areas. Hence, strong safeguards and formal complaint mechanisms linked to REDD+ would help ensure good results for all. The establishment of independent grievance and redress mechanisms at local and national levels would foster accountability and may help reduce conflicts among stakeholders. These mechanisms may also contribute to continuous improvement of REDD+ policies and projects through 'early warning' signals on adverse impacts of REDD+.

Conflicts have always been part of the daily lives of local communities and often there are traditional setups, which see to their resolution. Therefore, REDD+ conflict resolution process at the local level should adapt the existing traditional system of mediation at the Chiefs' palace. The Chiefs will need support from a conflict management team composed of representatives of farmer groups, unit committee/ assemblyman, the Forestry Commission, religious leaders and a legal person from the government. The Traditional Authority (i.e. chief and elders) must lead in the entire

conflict management process with assistance from the unit committee/assembly person and the Forestry Commission official.

With reference to REDD+ conflicts, where subsidiarity operates is when the culture of the community has its own competencies by way of resolving issues, then the National/State competence is not allowed to operate. Community interests here are supposed to guarantee National or State interest in a way as to promote REDD+ as a policy which the State develops. The subsidiarity will therefore be needed to attract the cultural significance of the community.

Different local elite groups have the potential to capture REDD+ benefits because of their position in the community setting or role in the REDD+ implementation processes as well as their rights regarding land or tree ownership. Among the local elite groups are Farmers groups; the local level governing bodies such as Area Council, Assemblyman and Unit committee; the Traditional Authority and registered tree planters. Some strategies to minimize elite capture include:

- Institution of a management committee with representatives from all relevant stakeholders to be part of the benefit sharing processes.
- Public knowledge of all stakeholders and percentage share in REDD+.
- Benefit sharing mechanism should be made transparent and the roles of the various groups clearly defined.
- Benefits should not be left with any local group to manage. In that case no one will be able to exert much influence.

Conclusion

The report has reviewed the current benefit sharing arrangements in Ghana's forest sector and its implication for REDD+ as well as assessed the inter-linkage between carbon rights and land/tree tenure. It has also discussed issues of elite capture, conflicts, safeguards and framework for addressing them. While drawing on the lessons and experiences from the forest and mining sectors, management of local development funds, and results of desk and field studies, the report proposes recommendations for addressing issues of land/tree tenure, derived and carbon rights and benefit sharing mechanism (institutional arrangements, benefit sharing models) for REDD+ implementation. Ghana can envisage an effective implementation of REDD+ by addressing key governance gaps such as those relating to tenure, carbon rights, conflict/dispute resolution, accountability and transparency, and the various recommendations and other forest sector reforms.

1. INTRODUCTION

Reducing Emissions from Deforestation and Forest Degradation including the role of conservation and sustainable management of forests (REDD+) is an effort to offer incentives for developing countries to reduce emissions from forested lands and invest in low-carbon paths to sustainable development. REDD+ activities do not only contribute to emissions reductions, but also bring about financial and other co-benefits which need to be distributed across a wide range of stakeholders linked to deforestation and degradation, sustainable forest management and forest regeneration. To maximize the opportunities that REDD+ provides and ensure that it delivers on its objectives there is the need for a well-designed, effective, efficient and equitable benefit sharing mechanism. Benefit sharing in REDD+ context entails agreements between stakeholders about the distribution of monetary and non-monetary benefits from the commercialization of forest carbon. Benefit sharing creates effective incentives by rewarding individuals, communities, organizations and businesses for actions that change unsustainable land-uses practices and reduce emissions. Moreover, it builds a wider legitimacy and support for the REDD+ mechanism.

Ghana's REDD+ Readiness Preparation Proposal (R-PP) emphasizes among others equitable benefit sharing as a critical component in the preparation toward effective REDD+ implementation. The challenges facing Ghana in developing an effective, efficient and equitable benefit sharing mechanism for REDD+ are those that relate to land/tree tenure, carbon rights definition, determination of benefit distribution mechanism, management of the benefit sharing process (transparency and accountability), determination of beneficiary stakeholders and dispute/conflict resolution mechanism. To address these issues, CSIR-Forestry Research Institute of Ghana (CSIR-FORIG) was commissioned by the Forestry Commission of Ghana to undertake a study with the goal of providing recommendations to addressing issues of land/tree tenure, carbon rights and benefit sharing critical for the implementation of REDD+ in Ghana[1].

This report presents the results of the study through a three-part format. Part 1 which contains sections 3-5 presents the results of the desk study. Section three provides a review of current benefit sharing arrangement in Ghana's forest sector and its implication for REDD+. Sections four deals with tenure and carbon right, and also assesses the inter-linkage between carbon right and land/tree tenure. Section five discusses lessons and experiences from voluntary partnership agreement (VPA) process, mining sector and management of local development funds. Part 2 which introduces sections 6-8 synthesizes results of the desk and field studies and propose recommendations for addressing issues of land/tree tenure, carbon rights and benefit sharing mechanism. Section six presents recommendations for addressing land/tree tenure, derived and carbon rights. Section seven outlines benefit sharing mechanism and associated institutional arrangements, different benefit sharing models that can be adopted for REDD+ implementation. Section eight discusses issues of elite capture, conflicts, safeguards and framework for addressing them. Finally, part 3 presents key governance gaps and recommendations for effective implementation of REDD+ in Ghana.

[1] See Annex A for the Terms of Reference.

2. METHODOLOGY

Two main approaches were adopted for executing the study namely, desk and field studies.

Desk study

The desk study focused on gathering existing relevant literature and background information on benefit sharing mechanisms in Ghana, identified gaps and challenges of implementing an equitable benefit sharing mechanism, access-right system and other institutional arrangements critical for implementing a benefit sharing mechanism. It also reviewed experiences and lessons from voluntary partnership agreement (VPA) process, mining sector and management of local development funds. Based on the desk study, benefit sharing models, institutional arrangements and recommendations to addressing carbon rights and tree land/tenure were proposed.

Field study

The objective of the field study was to determine stakeholders' perspectives on options of equitable benefit sharing schemes, safeguards to prevent elite capture, identify potential inter/intra community conflicts and resolution mechanisms. Participatory approaches namely, informal and formal interviews using semi-structured questionnaires, focus group discussions with stakeholders were employed to gather these important bits of information. In all 125 respondents were involved in the study spanning six communities namely, Adonikrom and New Yakasi in the Aowin District, with the rest, Amuni, Kamaso, Akyekyewere and Mumuni in the Wassa Amenfi District. These communities were selected based on their extensive experience in REDD+ discourse and pilot activities. Five focus group discussions were also conducted.

PART I

3. REVIEW OF CURRENT BENEFIT SHARING IN GHANA'S FOREST SECTOR

3.1 Current benefit sharing and incentive programs in Ghana's forest sector

Generally, there are four different forms of benefit sharing arrangements in Ghana's forest sector. These include, Constitutional Timber Revenue benefit sharing, Modified Taungya System benefit sharing, Commercial Plantation benefit sharing and Community Resource Management Area (CREMA) benefit sharing. Other forms of benefit sharing arrangements exist in the agricultural sector referred to as Traditional share contract (sharecropping/land sharing) benefit sharing namely, *Abunu* and *Abusa*.

3.1.1 Constitutional Timber Revenue Benefit Sharing

The 1992 Constitution of the Republic of Ghana guides the benefit sharing of timber revenue accruing from forest reserves and off-reserve areas. It stipulates the beneficiaries and their respective percentage share. Forestry Commission (FC), Office of the Administrator of Stool Lands (OASL), Traditional Authority (TA), Stool and District Assembly (DA) are the beneficiaries of the economic benefits accruing from timber resources. As directed by a Memorandum of Understanding (MOU), the Forestry Commission retains 50% of the collected revenue from forest reserves and off-reserves as management fee (FC, 2009). Subsequently, OASL deducts 10% of the remaining amount as directed by the constitution, with the remainder shared by the rest of the stakeholders as outlined in the 1992 Constitution. The schedule of benefit payments and the basis of the prescribed payments is presented in Table 1.

Table 1: Constitutional timber revenue benefit sharing

Stakeholders	Percent Share	Basis
Forestry Commission	50%	Management responsibilities
District Assembly	25%	Community development
Stool	11%	Maintenance of the Stool in keeping with its status
Traditional Authority	9%	Not stated, but may be consistent with that of Stool
Office Administrator of Stool Lands	5%	Cover administrative expenses

Source: Constitution of Republic of Ghana, 1992: 267(6); FC, 2009

3.1.2 Modified Taungya System (MTS) benefit sharing scheme

The Modified Taungya System is a plantation establishment mechanism introduced to fully involve farmers and resource-owning communities in the rehabilitation of degraded forest reserves while enhancing rural livelihoods and reducing poverty. MTS confers strong 'ownership rights', including stronger property rights to farmers. In addition, MTS has a benefit sharing mechanism for sharing revenue derived from extraction of mature trees. It is expected that MTS would lead to greater local community income while contributing to poverty alleviation in forest fringe communities. The benefit-sharing framework under the MTS and the underlying bases for assigning the various percentage shares are presented in Table 2.

Table 2: Modified Taungya System benefit sharing arrangement

Stakeholders	Percent share of benefit	Basis
Forestry Commission	40%	Responsible for the provision of technical support services, demarcation and mapping of sites, site-species matching, monitoring, quality control and plantation management, marketing and accounting of plantation products.
Farmers	40%	Responsible for seedling production, land preparation, planting and maintenance of the plantation.
Landowners	15%	Responsible for providing land. Responsible for community mobilization and conflict resolution. Guarantee uninterrupted access to the allocated land for the FC and other parties.
Forest Fringe Communities	5%	Responsible for protection against encroachers, illegal activities, wildfire prevention and control.

Source: Agyeman et al., 2010

3.1.3 Commercial Private Plantation revenue sharing (Reserve/Off-reserve)

The Forestry Commission, in a quest to increase forest cover and reduce deforestation, allocates portions of degraded forest reserves to private entities for plantation development. In areas outside forest reserves, private entities, communities or farmers who want to reforest land they own may do so on their own or apply for support from the Forest Plantation Development Fund. Under these two plantation development models, different benefit sharing arrangements apply. In forest reserves, the private developer shares revenue with the Forestry Commission, local communities and the landowner. In off-reserve areas, the sharing of the revenue depends on whether the private developer is a tenant or sole owner of the land being developed for the plantation. The different benefit sharing arrangements are presented in Table 3.

Table 3: Commercial Plantation Development benefit sharing arrangement

Stakeholders	Forest Reserve	Off-reserve	
		Sole landowner	*Developer not a landowner*
Private entity	90%	100%	67%
Landowner	6%	-	33%
Forestry Commission	2%	-	-
Local Community	2%	-	-

Osafo 2010; Weyns, 2014

3.1.4 Community Resource Management Area (CREMA) benefit sharing

CREMA is a geographical off-reserve area within which one or more communities surrounding the protected areas have agreed to incorporate sustainable wildlife management into existing land use (Wildlife Division, 2004). The rationale behind the

CREMA is to involve adjoining communities in wildlife management while providing them with economic incentives through sustainable income-generating activities compatible with wildlife management. The mechanism helps to reduce pressure on forests and wildlife resources located in the protected areas while allowing people to meet their livelihood needs (A Rocha Ghana and Forestry Commission 2009). The CREMA concept has now been extended to other communities for forest management.

CREMA communities and authorities develop their own benefit-sharing arrangements that are responsive to the CREMA stakeholders' values, perceptions of equity and needs. For example, in a typical CREMA, 5-10% of revenue goes to the CREMA Executive Committee, while 90-95% is allocated to the communities for development purpose. In some CREMA, the group decides to share revenue with the District Assembly and Traditional Authorities. Generally, the modalities of sharing benefits are agreed and documented by each CREMA hence benefit-sharing arrangements vary from one place to another.

3.1.5 Traditional share contract (sharecropping/land sharing)

Local communities in Ghana have traditionally developed agricultural crop/land sharing arrangement otherwise referred to as 'traditional share contracts'. These contracts between a landowner and a tenant farmer are meant to gain access to land, labour and capital (Amanor, 2001).

Abunu system denotes a half share sharecropping system in which a tenant farmer gains access to land in return for providing half of the crops or cultivated land to the landowner while the tenant keeps the other share. In the *Abusa* system, a tenant farmer gains access to land in return for providing one-third share of crops to the landowner while the tenant keeps two-thirds. In some areas, only land outputs are shared and not the land. It is noteworthy that *Abusa* is being replaced with the *Abunu* share contract (Amanor, 2001).

3.2 Existing benefit sharing mechanisms and its implication for REDD+

Existing benefit sharing schemes provide insight for development of equitable benefit sharing mechanism for REDD+ implementation. Therefore, it is important to assess the suitability or otherwise of the reviewed benefit sharing schemes in the forest sector for REDD+. This section provides key considerations and perceptions on existing benefit sharing mechanisms and their implications for REDD+ implementation (Table 4).

Table 4: Existing benefit sharing mechanisms and its implication for REDD+

Benefit sharing mechanism	**Perception**	**Implication for REDD+**
Constitutional Timber Revenue benefit sharing	*Inequitable:* Farmers, forest-adjacent communities and landowners (other than *Stools*) and are left out of the benefit sharing arrangement.	Not suitable for REDD+ since actors such as farmers and forest fringe communities and those whose efforts contribute to emissions reduction do not receive any benefits. Farmers and forest fringe communities are key actors in REDD+ mechanism.
Modified Taungya System Benefit Sharing	*Effectiveness:* Has been effective in increasing tree cover in a number of areas under MTS plantation. *Equitability:* Includes all relevant stakeholders contributing toward plantation development and forest management. *Co-benefits:* Promotes co-benefits such as cultivation of food crops before tree canopy closes. *Safeguards:* Lacks conflict management mechanisms. Also, 40% share of farmers applies to the whole Taungya farmer group. There is no mechanism on how to share benefits within Taungya farmer group members. *Tenure security:* Functional in forest reserves with established boundaries.	Model can be adopted for REDD+ in forest reserves and not in off-reserve areas where there is multiple resource ownership, unclear and contested boundaries. Since benefit sharing under REDD+ will bring about disputes and conflicts there is the need to develop dispute and conflict resolution measures for the model. REDD+ is incompatible with commercial intensive timber production. MTS benefit sharing model was designed for timber production where large sums of revenue are expected by stakeholders. There is strong possibility that revenue from carbon would be lower relative to timber revenues and could undermine participation of farmers and landowners if their expectation is not well-managed.

Commercial Private Plantation Revenue Sharing (Forest reserve) **Private Plantation Revenue Sharing (Off-Reserve)**	*Equitability:* Includes all relevant stakeholders for allocation of benefits. *Co-benefits:* Strong emphasis on monetary benefits (timber revenue) and no consideration of co-benefits. *Tenure security:* Functional in forest reserves with established boundaries. Benefit sharing excludes communities and state. Highly oriented toward private investment with limited public or state participation. *Tenure security:* High tenure security.	Suitable for REDD+ private project-level investment. Could consider reducing private entities' shares and transfer that to the State. Could also maintain percentage shares but pay tax on carbon credit to the State. REDD+ is incompatible with commercial intensive timber production. Benefit sharing model was designed for timber production where stakeholders expect large sums of revenue. There is strong possibility that revenue from carbon would be lower relative to timber revenues and could undermine the participation of farmers and landowners if their expectation is not well-managed.
CREMA Benefit Sharing	*Equitability:* Includes all relevant stakeholders for allocation of benefits. *Effectiveness:* Effective in protecting wildlife and forest management. *Co-benefits:* Promotes co-benefits such as non-timber forest products, eco-tourism, biodiversity, and alternative livelihoods. *Flexibility:* In some CREMA groups, there is periodic adjustment in benefit sharing scheme to reflect changing values. *Safeguards:* CREMA rules and regulations are enacted as local government by-laws. Although, there is no explicit dispute and conflict resolution framework, CREMA authorities rely on the by-laws and regulations to resolve disputes.	Model can be adopted for REDD+ in reserves (particularly, Globally Significant Biodiversity Areas) and off-reserve areas Periodic adjustment of benefit sharing arrangement could affect negatively or positively the implementation of REDD+ projects.

Traditional Share Contracts	*Security:* Liable to litigation. *Safeguards:* Lack explicit dispute and conflict resolution framework, disputants make use of traditional dispute resolution mechanism (traditional court system) or law court. Mostly, tenants' rights are disregarded. Lack formal legal backing and documentation. Based on customary arrangement and	Not suitable since REDD+. REDD+ benefit sharing mechanism requires strong and clear legal documentation for the purposes of legitimate claim to benefits and confidence in investing in emission reduction projects. Also, disregard of tenants' rights and proclivity for conflict and ligation would require strong safeguard measures that cannot be guaranteed in the present forest governance system.

4. LAND/TREE AND CARBON RIGHTS IN GHANA

The term land tenure implies the various laws, rules and obligations governing the holding, and/or ownership rights and interests in land (Kassanga, 1988). Land ownership in Ghana could be classified into three broad categories: land under customary ownership (78% of the total land area); state or public land (20%); and the remaining land area (2%) under some form of shared ownership (Deininger, 2003). Lands in Ghana are predominantly governed by customary laws (Olennu, 1962: in Boamah, 1986) and by statutory laws. This point to the fact that Ghana recognizes a legally pluralistic governance regime over land tenure. However, for all practical purposes when the state machinery is used and enforced, the customary system becomes weakened (Kassanga and Kotey, 2001). Land held under customary law is owned by Stools/Skins[2], families, or clans and is held in trust by the chief (head of the community) for the benefit of the community (Agidee, 2011). Concerning land, Klutse (1973) observed that interest in the land itself is distinct from interests in things on it or attached to it. Thus, planted or naturally occurring trees for instance are not regarded as part of a piece of land in almost all Ghanaian societies (Agyeman, 1994) particularly upon transfer. Such notions are reinforced by statutory laws governing land and tree tenure[3]. Obviously, Ghana's tenure regime is complex. It is such that land is owned by one entity but ownership and access to some resources such as trees are held by another entity. Nonetheless, all forestlands in Ghana (expect those under private plantation) are managed by the State in trust for the Stool landowners (Boakye and Baffoe, 2006).

Tree tenure refers to the bundle of rights over tree and tree products, each of which may be held by different people at different times (Fortmann, 1985). These rights include the right to own, inherit, dispose, use and exclude others from using trees and tree products. In Ghana, there are differences in tenure governing naturally occurring trees and planted trees. In relation to planted trees, the planter holds exclusive rights over the trees (access, withdrawal, management, alienation, exclusion). This is espoused in the Timber Resources Management (Amendment) Act, 2002[4]. Per this legislation, a planter may be a landowner or sharecropper or tenant farmer. Unlike planted trees, rights over naturally occurring trees whether in forest reserves or areas outside forest reserves are vested in the State on behalf of the Stools as established by Section 16 of the Concession Act, 1962. Consequently, timber right is granted by central government through its designated agency to interested persons or groups (timber companies) for timber exploitation after exhausting a competitive bidding process.

The implication of this legislation is that, the state exercises the full range of rights (access, management, withdrawal, alienation and exclusion) over naturally occurring timber trees. Farmers (and by extension local communities) on whose land these trees

[2] Stool refers to the seat of a chief of an indigenous state (sometimes, a head of family) which represents the source of authority of the chief (or head of family). It is a symbol of unity and its responsibilities devolve on its living representatives, the chief and his councilors. Land owned by such a state is referred to as stool land (National Land Policy, 1999). The equivalent of Stool in northern Ghana is the Skin.

[3] Section 16 of the Concession Act, 1962

[4] Timber Resources Management (Amendment) Act 617 of 2002, Section 4(3)

occur have only access right, unrecognized management right, *de jure* exclusion right and withdrawal right in the form of timber utilization permit (TUPs). It is noteworthy that, TUPs cannot be procured by an individual but group of persons such as rural community group, District Assembly, town committee, any or a non-governmental organization for social or community development purposes. Timber or lumber originating from TUPs cannot be sold or exported[5]. The unrecognized *de facto* management right of farmers is derived from the tree tending, nurturing and management activities they perform in maintaining the trees. The *de jure* exclusion right is provided under the Timber Resources Management Act, 1997 (Act 547) which stipulates a farmer's right to veto on-farm timber extraction that is not compatible with agricultural production. Farmers and local communities do not have withdrawal rights and alienation rights for commercial timber exploitation. Indeed, the vesting of naturally occurring timber trees in the State and subsequently sharing revenue that accrue from the resources without recourse to farmers who nurture and maintain them have brought about negative consequences. Farmers deliberately destroy the trees or sometimes connive with illegal chainsaw operators. This has resulted in forest degradation and increasing deforestation particularly in areas outside forest reserves.

The role of forests in climate change mitigation has brought about a new form of property right - carbon rights. Delineation of carbon right is not only critical for carbon trading but also important for sharing REDD+ benefits. The international framework for REDD+ implementation is yet to define carbon rights. This leaves participating countries to determine carbon rights individually and differently. However, in defining carbon rights, there are two concepts worth considering namely:

- *Sequestered carbon:* this is the commodity carbon itself, meaning it (sequestered carbon) is treated as a property separable from the tree or biomass in which it is stored. The owner of the tree, forest, soil or land will not necessarily own the sequestered carbon. In other words carbon is considered as an ecosystem service.
- *Carbon sinks:* these are the reservoirs in which the carbon is stored. They may be regulated by property rights that control trees or below ground resources.

This notwithstanding, there is no definition of carbon rights in Ghana. Carbon right would require explicit legislation on definition, allocation and transfer of this form of right. However, existing legislation on natural resources provide an indication of how carbon rights may be defined.

[5] Timber Resources Management Act 547, 1998, Section 18 (i)

4.1 Linkages between carbon rights and land/tree tenure

Although, there is no legislation in Ghana that defines and allocates rights to carbon, existing legislations governing rights to natural resources (minerals and timber) provide indication of how carbon rights could be considered in relation to land and tree tenure. In Ghana, mineral resources and naturally occurring timber trees are vested in the President (i.e. State)[6], who holds them in trust for the people. Accordingly, if carbon is considered as a naturally occurring economic resources tied to the sinks (i.e. trees and soil) then carbon would be treated as mineral or naturally occurring timber tree. Hence, ownership would be conferred on the landowner (Stools/Skins, families or individuals) but the right to commercially exploit carbon would be vested in the State. However, there would be the need for a legislative instrument to clearly stipulate that for legal reasons. On the other hand if forest carbon is considered as an ecosystem service, implying that *sequestered carbon* is a property separable from the tree or biomass in which it is stored, then there is no precedent for it in the laws governing natural resources in Ghana. Defining carbon as *sequestered carbon* would require a new legislative framework.

Defining carbon right as it pertains to minerals and naturally occurring timber trees could negatively affect communities' participation in REDD+ projects in natural forest areas. This is so because communities have expressed dissatisfaction with the present revenue sharing arrangements where most of the profits from mining and timber exploitation go to the private entities, traditional and local government authorities. Indeed, unless there is a strong and effective equitable mechanism for sharing of benefits from REDD+ between the State and key stakeholders such as farmers and local communities, the effectiveness of REDD+ would seriously be undermined.

4.2 Derived rights (tenant farmers/sharecroppers)

There are some categories of stakeholders whose activities are critical to the implementation of REDD+ in Ghana. These are *tenant farmers* and *sharecroppers* in off-reserve areas. Tenant farming and sharecropping are arrangements to gain access to land for farming. These arrangements apply to both migrants and indigenes. Most of the tenancy agreements are made orally while a few others have some form of documentation outlining the agreements. Tenant farmers/sharecroppers do not exercise full range of property rights like their respective landowners unless their land holdings were acquired through outright purchase. Rather, they exercise *derived rights* (*or secondary rights*) as a result of their tenancy or contract. This form of right may extend to trees they plant or to naturally occurring trees they manage on the land on which they have occupancy. In customary land tenure system, it is largely perceived that planting of trees is a means for gaining access to land or extending one's stay on the land. Granted, landowners may usually resist the planting of trees on their lands by tenant farmers or sharecroppers since it gives an indication of their desire to stay longer on the property. However, should the tenant farmers be allowed to do so there is no doubt that they would become legal and rightful owners of any tree they plant on the land as stipulated by the Timber Resources Management (Amendment) Act, 2002. On the other hand, where trees already exist on the farmlands, tenant farmers or sharecroppers may perform management activities to maintain or nurture these trees hence exercising *management right*.

[6] 1992 Constitutional of Republic of Ghana, Article 257(6); Minerals Act 703, 2006

Assuming management and ownership rights serve as bases for claiming REDD+ benefits, the question is would tenant farmers or sharecroppers receive the benefits or would it solely go to the land owner? Indeed, failing to recognize tenant farmers/sharecroppers' management right in the case of naturally occurring timber trees or ownership right in the case of planted trees could undermine REDD+. How? Well, perceiving that they may not benefit from carbon revenue that the trees generate, they may deliberately neglect maintenance of the trees or destroy them or engage illegal loggers to remove the trees. The situation justifies the need for incentivizing tenant farmers, sharecroppers and landowners to buy into forest conservation activities that inure to REDD+.

5. LESSONS FROM OTHER SECTORS

5.1 FLEGT VPA

In order to restrict access of, and eliminate illegal timber to the EU market, the Forest Law Enforcement, Governance and Trade (FLEGT) Action Plan was designed (European Commission, 2003). The FLEGT Action Plan includes the Voluntary Partnership Agreement (VPA), the adoption of procurement policies by member states that further promote trade in legal timber, promotion of private sector initiatives and the exercise of due diligence by export credit agencies among others. Ghana was the first country to conclude a FLEGT VPA with the EU. Negotiations on the agreement were concluded in September 2008, the VPA was formally signed on 20 November 2009 and was ratified by Ghana on 19 March 2010. The conduct of the VPA process provides several lessons for REDD+ implementation.

Consultation and engagement

FLEGT VPA process was very effective in consultation and engagement of all relevant stakeholders (civil society organizations, private sector, government, traditional authorities and local people). It allowed sufficient room for civil society (CSO) inputs and downward consultation and accountability. VPA negotiation process was sometimes frustratingly delayed because there was the need to build consensus on some issues before proceeding and not just sharing information. The VPA's consultation process allowed non-governmental actors to influence the content of the process with CSOs providing initial drafts of the VPA rather than EU consultants. The effective consultation and engagement process of VPA has been attributed to the ample time and financial resources that were made available under the VPA process for stakeholder consultation. Also, issues under VPA were clearly defined right from the beginning such as definition of legal logging and building of consensus (Marfo et al., 2013).

Although, REDD+ process has engaged stakeholders, it is still perceived that it has not been effective as FLEGT VPA. It is argued that, there seems to be a hurry to get results with REDD+, hence reducing REDD+ consultation to information sharing rather than consensus building and soliciting stakeholders' input. There is perceived CSO frustration as to why their findings were not used and were not consulted in identifying priority issues. It is noteworthy that, the process of REDD+ is still evolving, and many issues are not yet definite and so not much can be expected from REDD+. Besides, the requirements/demands of the funding agency and the resources (both time and finances) available for the consultation have been cited as contributing to the current situation. In spite of these, issues of benefit sharing, carbon rights and safeguards need to court very extensive stakeholder consultation and inputs.

Piloting strategy

FLEGT VPA is noted to have piloted some critical components of the process before finally adopting for application. For instance, the timber tracking system and legality assurance system in general were piloted before its wide application. REDD+ could also pilot benefit sharing models, measurement, reporting and verification system to learn lessons for improvement before final adoption.

5.2 Mining sector

The sharing of mining revenue is stipulated by the 1992 Constitution of the Republic of Ghana and the Minerals and Mining Amendment Act 794 in 2010, which amended the Minerals and Mining Act 703 of 2006. The Minerals and Mining Amendment Act 794, 2010 provides for a flat mineral royalty rate of 5%. Subsequently, the mining revenue (mineral royalty) is paid to Ghana Revenue Authority, which then dispenses the money into the Consolidated Fund. Of this sum, 80% is retained by the government and used for general budget support. In addition, 10% is dispensed into the Mineral Development Fund (MDF), which is purportedly used to fund public mining sector institutions and ad-hoc flagship projects in mining communities. The MDF is not only used to promote development in local mining communities, but also to compensate the same communities for the costs associated with mining. The remaining 10% of mining revenue is transferred on a quarterly basis to the Office of the Administrator of Stool Lands (OASL), which in turn dispenses the money directly to beneficiaries according to a formula outlined in Section 267(6) of the 1992 Constitution of Republic of Ghana. This stipulates that the OASL retains 10% to cover administrative expenses; 25% to the traditional authority for the maintenance of the stool; 20% to the traditional authority; and 55% to the District Assembly.

The distribution of mining revenue in Ghana is far from satisfactory. There is lack of accountability in the disbursement and use of the MDF. It is unclear how decisions are made concerning funding of the mining sector institutions. Moreover, in the past the Fund has also received less than 10% of mining revenue, payments appear erratic, and there have been no separate budget and auditing procedures for the fund (Standing, 2014). Poor financial accounting of mineral wealth by district assemblies have been raised by EITI reports—in the latest available report it was shown that only two district assemblies had a mechanism of accounting for funds (IMF, 2012 p. 101). Although, the MDF has financially supported small-scale miners and geological assessments, only small amount of the Fund has been used for projects explicitly designed for improving local economic development, and to compensate for the costs of mining. A large percentage of the Fund's expenditure goes to support capacity building of public institutions that study or work towards regulating mining (Standing, 2014). Criticisms have led to plans to implement a Minerals Development Fund Bill, which would provide a framework for the Fund's management. Also, the Ministries of Local Government and Rural Development, Lands and Natural Resources, and Finance and Economic Planning have provided District and Municipal Assemblies guidelines for use of mineral royalties.

In summary, the framework followed in Ghana for distribution of mineral revenues has been less effective in catalyzing local economic development in mining communities. It is a setup that lacks accountability and transparency and allows for elite capture while leaving decision making processes almost entirely 'in the hands of the local elites' (Marfo et al., 2012 p. 167).

5.3 Development Fund Management

Several development Funds (private and public) have been established and are in operation in Ghana. Some of the Funds (for example GET FUND, ROAD FUND and DACF) have been very instrumental in ensuring considerable development in the education, road and transport sectors. In this section, the structure, objectives and

management of publicly or statutory established Funds are described while their operations are assessed. Lessons/experiences gained in the operation of the Funds are useful in the event of establishing a Fund for REDD+ implementation. Table 5 presents description of selected relevant Funds in Ghana.

Table 5: Local development Funds in Ghana

FUND	OBJECTIVE/PURPOSE	MANAGEMENT	CHALLENGES
District Assembly Common Fund (DACF)	The Fund is to ensure equitable distribution of the national resources for the development in every part of Ghana. *Specifically:* To Improve housing Schemes To support sanitation management To strengthen decentralization To promote sustainable self-help development communities To improve upon primary health care delivery The Fund support community policing.	The Administrator of the DACF according to section 252 of the 1992 Constitution of Republic of Ghana is the sole Manager of the Fund. Disbursement of funds is based on a well-established formula taking into consideration need, responsiveness, service pressure and equality factors.	Delays in the release of funds Purported Central government interference Non-predictability of the amount to be received from the Fund Lack of transparency in MMDAs' use of DACF
Ghana Education Trust Fund (GETFUND)	The Fund is to provide finance to supplement the provision of education at all levels (Tertiary, Second Cycle and Basic education) by the government in accordance with a formula with respect to the aforementioned levels. It also finances some investment and other related aspects of education such, as distance education; school and public libraries; and special education.	An Administrator under the directives of a board of trustees manages the fund. The administrator is responsible for the day- to-day management of the Fund.	Delays in the release of funds Purported Central government interference Diversion of funds
The Road Fund	The Fund is to finance routine, periodic maintenance and rehabilitation of public roads in Ghana. The Fund shall also be used to assist the Metropolitan, Municipal and District Assemblies in the exercise of their functions relevant to public roads under any enactment.	The management board of the road fund takes charge of day-to-day management of the fund.	Inadequate financial resources High cost of road maintenance Rapid expansion of road networks
Ghana National Trust Fund (GNTF)	The purpose of the funds is to support the disabled and the less privileged.	The management of the fund is under Ministry of Employment and Manpower Development.	Lack of funds Poorly developed infrastructure (lack of offices)

Lessons for National REDD+ Fund

Some of the key factors affecting the operation and management of the Funds include delayed release of funds from central government, transparency and accountability

and alleged central government interference. To forestall some of these challenges, robust safeguard measures coupled with stringent enforcement are prerequisite. It is believed that establishing a National REDD+ Fund is a fundamental step for international payments for REDD+ activities. Should Ghana establish a national REDD+ Fund, the management and administration of the fund should be carried out in a transparent, effective and efficient manner. As much as possible, national REDD+ funds should be (i) be independent from government; (ii) managed by an independent body/set of managers; (iii) apply international accounting standards and meet international fiduciary criteria; (iv) focused on funding activities that contribute directly to the goals of the National REDD+ Strategy (v) be anchored in transparent processes. The establishment of a national REDD+ fund should take the following into account:

- Structure – design of the fund, including its legal personality and relationship with the government;
- Governance and management – composition, function and responsibilities of bodies or persons charged with governing and management of the fund;
- Principles and rules on investment and disbursement – approach, rules and guidelines set out for investing the fund and distribution of the dividends;
- Evaluation – rules and process for effective and transparent monitoring and evaluation of the performance of funded activities;
- Safeguards – rules, processes and guidelines set out for ensuring transparency and accountability in the management and operation of the Fund.

PART II

6. ADDRESSING TENURE (LAND, TREE, DERIVED RIGHTS) AND CARBON RIGHTS FOR REDD+

The legally pluralistic governance system governing land tenure in Ghana and the vesting of naturally occurring timber trees in the State poses some difficulties for REDD+ implementation. For effective implementation of REDD+, land and tree ownership should be aligned while harmonization or legal integration of the two land tenure regimes (customary and statutory) is pursued. The Land Administration Project (LAP) is seeking to achieve the harmonization. In the meantime, land rights are been registered at Customary Land Secretariats in some regions in Ghana in the quest to clarify the land tenure systems. The registration is expected to cover the whole of Ghana. Also, the existing tree tenure should be reformed such that ownership of naturally occurring timber trees are vested in persons or entities with management, exclusion and alienation rights to trees and land. The implication is that holders of allodia and freehold land titles under customary land ownership would exercise ownership right over naturally occurring trees on their lands. This would incentivize critical stakeholders such as farmers and forest-adjacent communities to invest in forest management and conservation for effective implementation of REDD+. Providentially, a White Paper by government on review of Ghana's Constitution subscribes to this kind of tenure reform. The Government's White Paper has accepted the recommendation to 'vest all of Ghana's natural resources in the people of Ghana but held in trust for the people by the President'

To address the challenges that *derived right* holders (tenant farmers and sharecroppers) face in the implementation of REDD+, there should be strive toward legal documentation of tenancy or contract between tenant farmer/sharecropper and the landowner. The agreement should acknowledge the derived rights of the tenant or sharecropper and stipulates the formula for sharing REDD+ benefits between the landowner and the tenant farmer/sharecropper. The same would apply to benefits that accrue from existing trees maintained by tenant farmer or sharecropper. This recommended approach would work out well if carbon rights were tied to bundle of rights (management, exclusion and alienation) exercise over trees or land. As such the landowner who enters a sharecropping arrangement or admits a tenant farmer would include a benefit-sharing component in the tenancy agreement.

With regards to carbon right, the determination of who owns carbon at the local level is irrelevant if Ghana decides to take a 'national approach' toward the implementation of REDD+. Nonetheless, Ghana's adoption of the nested approach to REDD+ implementation makes it important to define carbon right now. Consistent with the proposed tree tenure reform where ownership of naturally occurring timber trees are vested in persons or entities with management, exclusion and alienation rights to trees and land, carbon should be defined as tied to sinks (trees, soil or land). Consequently, persons or entities that exercise the aforementioned range of rights would be vested with carbon right. FAO (2011) reports that in many Asia-Pacific countries the person who owns forestlands, or who is entitled to usufruct rights and forest user rights owns *a priori* forest carbon.

7. REDD+ BENEFITS AND BENEFIT SHARING

REDD+ is expected to generate various forms of benefits both monetary and non-monetary. Non-monetary benefits include capacity building, sustainable agriculture, sustainable forest management, ecotourism, improved tenure and forest governance, enhancement of forest ecosystem services, biodiversity conservation, social infrastructure development and provision of alternative livelihoods. Three forms of REDD+ monetary benefits (financial payments) can be distinguished[7]:

- *Compensation for opportunity costs:* Opportunity costs refer to the value of the next most profitable land use forgone. It is expected that individuals, communities and groups who change their land use in order to conserve forest, reduce carbon emissions and store carbon should be paid direct financial benefits.
- *Funding for productive activities:* These are the funds provided to support the implementation of productive activities that store carbon such as tree planting aimed at relieving pressure on natural forests.
- *REDD+ 'rent':* This refers the net gain realized from trading carbon credits. It represents the difference between the cost of implementing REDD+ (opportunity cost and implementation cost) and the average global carbon price at which emissions reductions credits from REDD+ could be sold.

REDD+ benefit sharing on the other hand involves the distribution of monetary and non-monetary benefits between different relevant stakeholders based on agreed set of standards. Sharing of REDD+ benefits creates effective incentives by rewarding individuals, communities and organizations for actions that change land-uses and reduce emissions. Also, sharing REDD+ benefits helps in building wider legitimacy and support for the REDD+ mechanism. The establishment of effective and equitable benefit sharing mechanisms for REDD+ cannot be discounted. However, it can be challenge in many countries that lack benefit sharing mechanism for sharing forest benefits including that of REDD+.

In the sections that follow, the various institutional and governance structures needed to distribute REDD+ benefits in Ghana as well as how it can be operationalized are described. It further recommends benefit sharing models (existing and proposed benefit sharing schemes) that can be adopted for REDD+ implementation in Ghana. The section also argues four critical considerations that are important for the adoption of the benefit sharing models.

7.1 Benefit sharing mechanism

Benefit sharing mechanism involves a variety of institutional means, governance structures and instruments for distributing finance and other benefits (Luttrell et al., 2013, 2012; Vhugen and Miner, 2011). Benefit sharing mechanism can be organized along two main axes: *vertical* and *horizontal. Vertical* benefit sharing mechanism distributes benefits from national to local level, while the *horizontal* benefit sharing mechanism distributes benefits between and within communities and households (Lindhjem et al., 2010; UN-REDD, 2011). Ghana's choice of *Nested approach to REDD+ implementation* means that it would pursue a combination of the two

[7] See, Peskett, 2011 p. 5

payment systems. But whatever form the benefit sharing mechanism takes, it should address the '3Es':

- Effectiveness: effective enough to incentivize participating actors to reduce emissions through deforestation and forest degradation while enhancing carbon stock.
- Efficiency: maximizes benefits on every unit of input (transaction and implementation costs) in reducing emissions.
- Equity: benefits are distributed among all legitimate beneficiaries who have contributed toward verified emission reduction or additionality.

In the sections that follow, the various institutional and governance structures needed to distribute REDD+ benefits in Ghana as well as how it can be operationalized are described.

7.1.1 Institutional framework for REDD+ benefit sharing

The effectiveness of sharing REDD+ benefits depends in part on the ability of institutional framework established to govern the equitable distribution REDD+ benefits and implementation of REDD+ policies and measures. The setting up of institutional framework is influenced by the source of REDD+ financing and the approach to REDD+ implementation. Institutional framework can be elaborate, complex or simple depending on the number of actors involved, the goal and objective. Completely new institutional framework may be established or existing ones may be augmented with a few new ones added for the implementation of REDD+. In this section, broader institutional set-up fashioned after a *nested approach* is proposed to guide the establishment of a benefit sharing mechanism for REDD+ implementation in Ghana (Fig. 1).

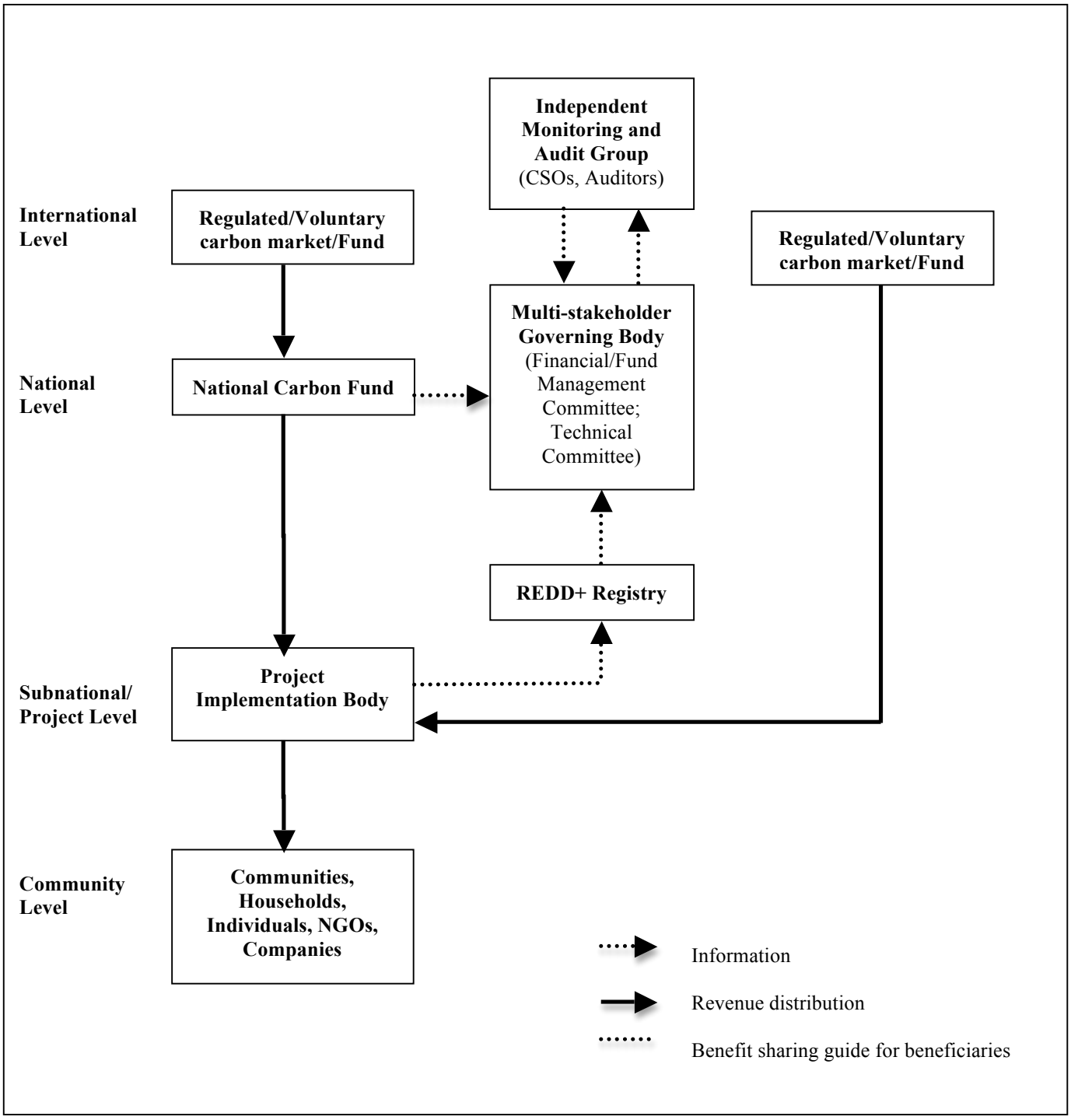


Figure 1: Proposed REDD+ benefit sharing mechanism

The various institutions to deliver and manage REDD+ benefits under the proposed REDD+ benefit sharing mechanism include: *Multi-stakeholder Governing Body (MGB); Project Implementation Body (PIB); Independent Monitoring and Audit Group (IMAG); National Carbon Fund* and *Carbon Registry*. The description of role/functions and proposed membership of the institutions are given in Table 6.

National Carbon Fund

To ensure effective implementation of REDD+ program and distribution of benefits, the establishment of a National Carbon Fund is recommended. The purpose of the Fund is to serve as a channel of receipt of all funds and revenues for national level projects. Funds or revenue from private sector engagement in REDD+ projects would not be deposited into this Fund. The National Carbon Fund can be administered in one of the three ways:

- *Independent REDD+ fund outside state administration*: A fund established outside the state administration and governed by a board that is made up of which could multi-stakeholder representatives. It is most suitable mechanism when the government administration is not very effective and reliable. This option is highly recommended for Ghana's REDD+ implementation.
- *REDD+ fund within the government administration:* A national fund established within existing structures of the state administration. A management board consisting of representatives from various national stakeholder groups manages it. This option is suitable when the government sector is effective and reliable for disbursement of funds.
- *REDD+ fund integrated in government regular budgets:* REDD+ funds are distributed as general budget support from central government through existing designated agencies.

Multi-stakeholder Governing Body (MGB)

The management and coordination of REDD+ implementation process in Ghana and its associated carbon benefits calls for the establishment of a *Multi-stakeholder Governing Body*. The MGB would be responsible for the technical and financial administration of REDD+ projects and funds disbursement. It would consist of representatives from Ministries of Lands and Natural Resources, Environment, Science, Technology and Innovation, Finance and Economic Planning; Forestry Commission; Auditor General; Attorney General; Research and Academia and Civil Society Organizations. To make use of existing structures, it is recommended that Forest Commission's REDD+ Secretariat at the Climate Change Unit hosts this body. Its members can be drawn from the memberships of the appropriate technical working groups. The MGB would be composed of two committees namely, Technical and Financial/Fund Management committees. The roles of the committees are outlined below:

- *Technical Committee:* responsible for measurement, reporting and verification of emission reduction claims of REDD+ projects; advice preparation of contracts and supervise dispute/conflict resolution teams at the district levels.
- *Financial/Fund Management Committee:* responsible for disbursement of the payment of carbon benefits accessed from the Fund to sub-national level implementation body (*Project Implementation Body*) at the district level for subsequent payment to identified beneficiaries.

Independent Monitoring and Audit Group (IMAG)
To ensure accountability and transparency in REDD+ implementation and particularly payment of carbon benefits, an *Independent Monitoring and Auditing Group* made up of certified auditors and civil society organizations would be established. It would monitor and audit the activities of the MGB, PIBs and the activities of a private developer engaged in REDD+ projects with communities. This will serve as safeguard for both parties (developer, participating communities/individuals) to honour their respective obligations while ensuring that international and national standards are adhered to for effective implementation of projects. The audit report should be made available to the MGB and the general public. Members can be drawn from the memberships of the appropriate technical working groups of the national REDD+ working group, Ministry of Finance and Economic Planning; Forestry Commission; Department of Auditor General.

Project Implementation Body (PIB)
The *Project Implementation Body* would be established at the district level and would be responsible for management and coordination of REDD+ projects and payment of carbon benefits at the district and project level. It would access the funds from the national carbon fund and make subsequent payment to communities and individuals illegible for to receive carbon benefits based on the approved benefit sharing scheme under their respective areas of jurisdiction. The PIB will report to the MGB and its activities would be audited by the IMAG. The PIB would be composed of district assembly's environment and financial officer, representatives of the Forest Service Division, Traditional Authorities, Office of Administrator of Stool Lands and participating communities.

Carbon Registry
Carbon registry is a data management platform that serves to document, approve and track the development, compliance, performance, purchase, and retirement of emissions reductions from projects or programs operating under a regulated or voluntary market or international funds mechanism (Asare et al., 2013). The aim of the registry is to enable the tracking of all REDD+ activities taking place within the country and monitor compliance to standards in carbon credit transactions irrespective of the financing mechanism. All information on emissions reduction activities at the national and project levels would be sent to the Registry.

Table 6: Description, functions, membership of proposed institutions for benefit sharing mechanism

Institutions	Description	Roles/Functions	Possible membership
National Carbon Fund	Channel of receipt of all funds and revenues for national level projects governed by a board	Serve as a channel for receipt of all funds and revenues for national level projects. Payment form carbon benefits would be made from this Fund	
Multi-stakeholder Governing Body	Composed of two committees: Technical and Financial/Fund Management committees	Responsible for the technical and financial administration of REDD+ projects and funds disbursement	Forest Forum members National REDD+ Technical Working Group (MRV technical Sub-Working Group)
Independent Monitoring and Audit Group	Composed of certified auditors and civil society organizations to ensure accountability and transparency in REDD+ implementation	Monitor and audit the activities of the MGB, PIBs and the activities of a private developer engaged in REDD+ projects with communities	SESA technical Sub-Working Group Ministry of Finance and Economic Planning Forestry Commission; Department of Auditor General
Project Implementation Body	District level REDD+ project implementation body	Responsible for management and coordination of REDD+ projects and payment of carbon benefits at the district and project level	Community Forestry Committees District Forest Forum members Traditional Authorities, Office of Administrator of Stool Lands
Carbon Registry	A data management platform that serves to document, approve and track the development, compliance, performance, and transaction of emissions reductions from projects	Tracking of all REDD+ activities taking place within the country and monitor compliance to standards in carbon credit transactions irrespective of the financing mechanism	MRV technical Sub-Working Group

7.1.2 Operationalizing the proposed benefit sharing mechanism

This section describes the operation of the proposed benefit sharing mechanism for fund-based and market-based REDD+ programs. It explains the functional operations of national level programs (national approach) and at project level (sub-national approach). It describes information flow and payment channel from one institution to another.

National level program (National approach)

Funds received from international REDD+ funding or carbon payments received from carbon markets would be deposited into the *National Carbon Fund*. Subsequently, specified payments to respective districts participating in REDD+ projects whose

payments are received would be made available to the respective *Project Implementation Body (PIB)* operating at the district level. Upon receipt, the PIB would access the funds and make subsequent payment to communities and individuals based on the approved benefit sharing scheme for that the respective projects. The PIBs would submit reports (technical and financial) to the MGB and IMAG for auditing. Also, relevant information on carbon emissions and transaction would be logged into the *Carbon Registry.* Information from the Registry would be accessible to MGB and IMAG.

Project level (Sub-national approach)
Under sub-national approach, revenue received from carbon markets would not be deposited into the Fund but distributed directly to communities and individuals based on the agreed benefit sharing scheme(s) that applies to the project. However, as a safeguard for the two parties, the developer would submit information (technical and financial) to the PIB coordinating REDD+ activities in the project areas. Such information would be accessible to the MGB and IMAG. This is to ensure adherence to the terms of agreement or contract, rules of engagement, dispute resolution and adherence to standard in the conduct of REDD+ projects with communities or individuals.

7.2 Benefit sharing models for Ghana's REDD+: Some critical considerations

In adopting benefit sharing models for REDD+ implementation in Ghana, it is important that certain factors are taking into consideration. The factors include: forest management regimes, REDD+ co-benefits and safeguards. Forest management regimes reflect the various forest management tenure contexts while co-benefits relate to non-monetary REDD+ benefits. Safeguards are measures that are taken to prevent elite capture and corruption but promote accountability and transparency. Equity on the other hand deals with fair allocation of benefits to legitimate beneficiaries. The argument is that, benefit sharing models should be adopted in such a way that they reflect the various forest tenure contexts in Ghana, while allocating benefits to legitimate beneficiaries in an accountable and transparent manner as well as catering for distribution of non-monetary benefits.

Forest management regimes
Ghana's forest landscape in terms of tenure and management can be categorized into five main management regimes, namely: Protection forest reserves (e.g. Ankasa forest reserve), Plantation forest reserves (e.g. modified taungya system), Off-reserve areas (trees on-farm), Community resource management areas (CREMA) and Community forest. Different benefit sharing arrangements apply to each of the forest management regimes outlined. Institutions and structures have been developed to provide the operational framework for its application. Upon adopting an appropriate benefit sharing scheme, considerable cost can be saved since the development of an entirely new institutions and structures for its implementation may not be necessary. The existing structures with probably few additional modifications reflecting the nature of REDD+ may be used administering benefits to beneficiary stakeholders. What this means is that, when citing REDD+ projects, the forest management regimes in the project area ought to be identified. Thereafter, decision has to be made as whether the prevailing benefit sharing arrangement under the regime is among those adopted for REDD+ implementation. If it is affirmative, then that benefit sharing scheme would

be used for distributing REDD+ benefits. However, where the regime's benefit sharing scheme is not part of the recommended ones, then a decision is made in selecting from any of the four recommended benefit sharing models discussed in section 7.3.

Co-benefits

REDD+ is expected to generate both monetary and non-monetary benefits. Although, expectation concerning financial rewards seems high among stakeholders, such expectation is largely to be unfulfilled due to high REDD+ implementation cost coupled with potentially low international carbon prices for sequestered carbon. Managing expectation on REDD+ benefits while ensuring effective would require that potential benefit sharing models for sharing REDD+ benefits target both monetary and non-monetary benefits (co-benefit). Benefit sharing arrangements that strive toward distribution of monetary and non-cash benefits are most appropriate avenues to serve the purpose of balanced and realistic expectation of REDD+ benefits. It also minimizes the monetization of the climate mitigation mechanism. Benefit sharing schemes that promote co-benefits such as sustainable agriculture, ecotourism, biodiversity conservation and management of ecosystem services, social infrastructure development and provision of alternative livelihoods help promote sustainable forest management.

Safeguards

There are many risks to REDD+ implementation owing to poor forest governance (tenure, resource rights), corruption and low levels of transparency and accountability. A large infusion of REDD+ money could exacerbate these governance challenges. Due to such risks, the UNFCCC text calls on REDD+ countries to provide information on the safeguards to address a range of environmental and social issues of forest governance, respect for the rights of indigenous and local communities, stakeholder participation and enhancement of social benefits (UNFCCC, 2011: Annex I). Safeguards are essential for the success of REDD+ implementation. Therefore, benefit sharing models need to incorporate range of safeguards into the distribution of benefits in order for it to be deemed effective and equitable. Some of these safeguards include participatory decision-making, financial audits, public disclosure of reports, and respect for customary and local communities' rights.

7.3 Benefit sharing models for REDD+ implementation

Reflecting on the factors outlined in section 7.2 in relation to the analysis at section 3.2 and the results of the field work (see Annex B), this section recommends existing benefit sharing models that can be adopted for REDD+ implementation in Ghana. Results from the field work revealed that individual payment schemes were most preferable (73%) follow by Fund-based schemes (21%). Consistent with the views from the field work and other similar studies conducted by International Union for Nature and Conservation (IUCN) reported in Foli and Dumenu (2011), three existing benefit sharing schemes were recommended for adoption for individual payment schemes. For the *Fund-based* payment scheme, the study proposed a model that can be adopted for implementation.

Three existing benefit sharing models that can be adopted for REDD+ benefit sharing include CREMA, MTS and Commercial forest plantation development benefit

sharing. These benefit sharing models address elements of equity, effectiveness, co-benefits and safeguard measures that can support REDD+ benefit sharing mechanism. For instance, the models strive at equity by allocating benefits to all relevant actors contributing to forest management and conservation. Also, they demonstrate effectiveness by incentivizing participating actors to reduce deforestation and forest degradation. Under CREMA, actors have contributed to forest management and conservation by refraining from activities that contribute to forest degradation and deforestation such as farming and engagement of illegal logging in forest reserves and protected areas. Under MTS and commercial forest plantation development models, degraded forest reserves are being restored by stakeholders (particularly famers). Community revolving fund as a fund-based benefit sharing scheme has the potential to supporting participating stakeholders in planting and maintenance of trees as well as support various economically viable income generating activities they undertake. Table 7 presents the recommended benefit sharing models, their complementary features for REDD+ and forest management regimes under which they can be applied.

Table 7: Benefit sharing models recommended for REDD+ implementation

Benefit sharing models	**Complementary features for REDD+**	**Forest management regime**
CREMA	Clear project boundaries Flexible benefit sharing process Potential structures for dispute and conflict resolution Inclusion of all relevant stakeholders in sharing of benefits Effective in achieving sustainable forest management and wildlife conservation The processes and structure of the CREMA allow for democratic decision-making and problem solving which in turn build strong social cohesion Promotes co-benefits (non-monetary benefits) such as eco-tourism, sustainable utilization of non-timber forest products and alternative livelihood activities such as bee-keeping CREMA rules and regulations have legislative backing as local government by-laws. This is a safeguard measure that gives credence to law enforcement	Off-reserve Protected areas GSBAs
MTS	Clear project boundaries Inclusion of all relevant stakeholders in sharing of benefits Effective in increasing forest plantation cover (implication for enhancement of carbon stocks) Valid contract between the Forestry Commission (government agency) and the other participating stakeholders - an important safeguard measure Promotion of co-benefits (non-monetary benefits) such as food crops before canopy closure and the introduction of alternative livelihoods	Forest reserves
Commercial Plantation Development model (Reserve/Off-reserve)	Inclusion of all relevant stakeholders in sharing of benefits Clear project boundaries Effective in increasing forest plantation cover (implication for enhancement of carbon stocks)	Forest reserves Off-reserve

Community Revolving Fund	Potential to ensuring communities' long-term benefit from REDD+ activities upon its expiration Promotes co-benefits (non-monetary benefits) through financial support for viable alternative livelihood activities Support individuals for continuous forest management activities	Off-reserve Forest reserves

7.3.1 Individual payment scheme

This option allows payments to individuals for activities they have undertaken under a REDD+ project. Benefit sharing models under individual payment scheme provide the means of compensating individuals' opportunity costs and rewarding productive efforts in reducing emissions and enhancing carbon stocks. Individual payment schemes see to it that greater portion of REDD+ benefits (particularly monetary) if not all goes to individuals rather than the collectives such as communities. Individual payment schemes avoid the risks associated collective or group managed schemes. The CREMA, MTS and Commercial forest plantation development benefit sharing models are recommended for adoption for REDD+ implementation.

CREMA benefit sharing

CREMA governance structure and benefit sharing mechanism are such that it addresses some of the main social, tenurial and technical challenges associated with benefit-sharing in REDD+ projects. The processes and structure of the CREMA allow for democratic decision-making and problem solving which in turn build strong social cohesion (Asare et al., 2013). These attributes coupled with clear project boundaries have positive implications for permanence and reduction of potential leakage beyond the project area. Most CREMA benefit sharing schemes include all potential relevant stakeholders such as forest-adjacent communities, farmers, landowners and government agencies (forestry and local government). Also, REDD+ projects and sharing of the benefits associated with it require that several stakeholders (forest users, farmers, forest managers, private sectors) are brought together. The initial organization of stakeholders to undertake REDD+ project and subsequently share benefits that accrue can be at a considerable cost. This is where the CREMA model makes a difference: the model has already brought together large numbers and different resource users in an effective manner. Where CREMA exists, it has tested and proven mechanisms to bringing together multiple actors to converge towards a single goal of sustainable resources management.

Additionally, CREMA rules and regulations are enacted as local government by-laws giving it legislative backing. This is a safeguard measure that gives credence to law enforcement. The participatory and adaptive nature of the CREMA creates opportunities to address differences of opinion and support democratic decision-making processes that are backed-up by traditional values and by-laws. Its benefit sharing model allows for adjustment of the terms for sharing of benefits consistent with members' values and changing conditions. This bodes well for sharing REDD+ benefits particularly when carbon revenue or REDD+ funds drops. It also promotes co-benefits (non-monetary benefits) such as eco-tourism, sustainable utilization of non-timber forest products and alternative livelihood activities such as bee-keeping. The attributes discussed makes CREMA benefit sharing model suitable for application in off-reserve areas, protected areas such as GSBAs for REDD+

implementation.

Modified Taungya benefit sharing
The benefit sharing mechanism for MTS has some inherent attributes that makes it suitable for adoption for REDD+. Its benefit sharing arrangement includes all relevant stakeholders such as forest-adjacent communities, farmers, landowners and government agencies (forestry) in the allocation of benefits. It does not only reward individual efforts but also forest-adjacent communities. This is very critical in creating legitimacy. The cultivation of food crops before canopy closure and the introduction of alternative livelihoods to support taungya groups (farmers) point to the promotion of co-benefits (non-monetary benefits) thus the potential to serve as an entry for REDD+ non-monetary benefits. There are some considerable safeguard measures such as valid contract between the Forestry Commission (government agency) and the other beneficiary stakeholders. However, dispute resolution mechanism and disclosure of revenue generation should be made explicit or worked at before its adoption for REDD+. MTS benefit sharing model should be adopted for REDD+ projects or programs in forest reserves where the state is a partner or participating stakeholder. The experience of multiple resource ownership, unclear and contested boundaries in off-reeve areas makes the adoption of MTS benefit sharing schemes less suitable for off-reserve areas.

Plantation development benefit sharing (commercial and private)
Commercial plantation development benefit sharing scheme exhibits attributes that makes it adoptable for REDD+ sub national project involving sole private sector investment. The scheme can be adopted in forest reserves and off-reserve areas. This benefit sharing arrangement like the previously recommended ones include all relevant stakeholders such as forest-adjacent communities, landowners and government agencies (Forestry Commission) in the allocation of benefits. In terms of safeguard, it is recognized by the Forest Plantation Development Fund Act, 2000 (Act 583

7.3.2 Fund-based scheme

Community revolving fund (Proposed)
Community revolving fund (CRF) is proposed benefit sharing scheme for the distribution and allocation of REDD+ benefits. Under this scheme, revenues accruing from REDD+ activities will be put in a fund and managed by trustees decided on by the communities themselves. The Fund would support beneficiaries to cover direct REDD+ project expenses of participating stakeholders such as planting and maintenance of trees and to undertake various economically viable income generating activities. It is argued that the scheme has the potential to ensuring communities' long-term benefit from REDD+ activities upon its expiration while providing avenue to reducing pressure on forest since the Fund would provide the needed financial support for viable alternative livelihood activities.

Description: An established Fund managed by multi-stakeholder trustees. Up to 30% of the funds in the Fund would be used to support direct REDD+ project expenses of participating stakeholders such as planting and maintenance of trees. Sixty percent would be used to support various economically viable income generating activities of beneficiaries. Beneficiaries are expected to pay back the principal loan with interest in

order to grow and sustain the Fund. The Fund managers together with co-opted persons with background and experience in small and medium scale enterprise projects would assess the various proposals on income generating livelihood projects. The remaining 10% would be used for administrative expenses.

Source of funds: Revenue generated from sale of carbon or funds from international carbon fund, and interest from loan repayment.

8.0 REDD+, CONFLICTS AND CONFLICT MANAGEMENT MECHANISM

The potential of REDD+ funding to increase the value of standing forests may fuel already on-going conflicts over land ownership in forest areas. Hence, strong safeguards and formal complaint mechanisms linked to REDD+ would help ensure good results for all. The establishment of independent grievance and redress mechanisms at local and national levels would foster accountability and may help reduce conflicts among stakeholders. These mechanisms may also contribute to continuous improvement of REDD+ policies and projects through 'early warning' signals on adverse impacts of REDD+.

In Ghana, the need for institutionalized mechanisms that will allow feedback, participation and complaints from local people and those acting on their behalf, in addition to others experiencing that their land and interests are threatened by REDD+ have been set up. It is envisaged that the set up will allow early warning and timely feedback, and adjustments and continuous improvements of REDD+ plans and policies. REDD+ management arrangement in Ghana is made of ministerial and implementing agencies from the Cabinet – Ministries – Technical Committees - Steering Committee – Forestry Commission (climate change unit) - Forest forums - Local Stakeholders (farmers, communities, traditional authorities, chainsaw operators, NGOs, timber industries) and District Assemblies. This arrangement is to make sure that any future REDD+ mechanism will be to account for GHG emissions at a national level. Thus, the country will decide on implementation options and to integrate projects, NGOs and communities into the carbon market framework.

The need to establish proper grievance or conflict-resolution mechanisms in the readiness phase is already recognized and proposed. The draft FCPF/UN-REDD Guidelines on the Participation of Indigenous Peoples and Other Forest Dependent Communities suggests that, "the consultation process should define specific grievance and grievance redress mechanisms. This could include both local and national level conflict management systems, provided they are accessible and affordable". This therefore requires consultation with local stakeholders to map existing grievance and redress mechanisms on the national and local level, and also the establishment of new ones if need be.

The criteria for grievances could be as follows:

- Ability to respond quickly;
- Independence, transparency, fairness and impartiality;
- Easy accessibility, and set-up to hear plaintiffs;
- Inclusion of independent (non-State) experts;
- Inclusion of experts from indigenous peoples and civil society; and

- Authority to order restitution or compensation, and to stop on-going or planned activities that would undermine human rights and safeguards.

Experience over the years has shown that safeguards are ineffective without mechanisms in place to ensure compliance and accountability. Information systems need to be designed to be transparent and publicly accessible, include participatory and independent monitoring approaches and produce relevant quality information to allow for tracking of how safeguards are addressed and respected. Also, ensure that local communities and peoples' grievances can be addressed in cases where national level mechanisms are dysfunctional. This brings forth the concept of subsidiarity. The subsidiarity principle means that the Community shall take action only *"if and insofar as the objectives of the proposed action cannot be sufficiently achieved by the Member States and can therefore, by reason of the scale or effect of the proposed action, be better achieved by the Community".* This therefore provides a relationship between communities and state not societies. Subsidiarity principle works in two ways: that it finds a competence on the lower level of government, *i.e.* the Member State level, if the objectives of an action can be achieved at that level, and a competence on the higher level, *i.e.* the Community level, if the said objectives cannot be thus achieved it also, conversely, acts as a "double-edged sword" which prevents both the higher and the lower level "from taking an action in areas properly falling within each other's respective sphere of action". Within this context, as far as the creation of new Community competences is concerned; such a creation can, according to circumstances, validly be based on the subsidiarity principle whereby Community system of competence allocation of their residual powers are held by the Member States, whereas the Community is, in principle, free to act within the scope of its concurrent competences. Subsidiarity is not to be treated as a legal norm but rather as a principle to be followed when dealing with communities.

With reference to REDD+ conflicts, where subsidiarity operates is when the culture of the community has its own competencies by way of resolving issues, then the National/State competence is not allowed to operate. Community interests here are supposed to guarantee National or State interest in a way as to promote REDD+ as a policy which the State develops. The subsidiarity will therefore be needed to attract the cultural significance of the community. This can offer the State an exit possibility in answering cultural questions that will protect the cultural competences of a Community. In terms of application, subsidiarity should not be understood as rule of law, rather it is a technical application to make progress in an on-going process. It pervades the whole field of the relationship between Community and State competences. It restricts the absolute supremacy of Community law to conflicts with those national laws which are intended to regulate a subject matter, in this case REDD+.

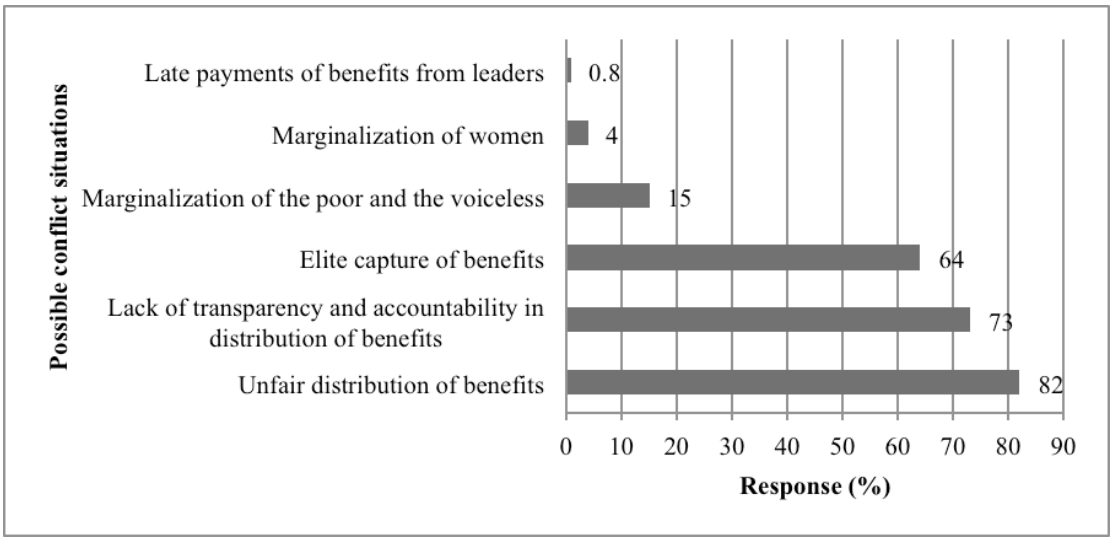
8.1 REDD+ conflicts, conflict resolution structures and subsidiarity principle

This sub-section focuses on the sources of potential inter/intra risks that may arise from REDD+ benefit sharing as perceived by local people as well as the sources or risks of elite capture at the local level. It further discusses the principle of subsidiarity in relation to REDD+ conflict and conflict resolution structures. Finally, it contains proposals on structures for addressing REDD+ related conflicts at the lowest or most localized level appropriate as perceived by local people.

8.1.1 Risks of inter/intra-community conflicts arising from REDD+ benefits

The sources of potential inter/intra community conflicts that may arise from REDD+ benefits as perceived by the local people involved in the survey are presented in Figure 2. The results showed that a greater proportion of the respondents (n=118) mentioned unfair distribution of benefits that may emanate from REDD+ as potential conflict sources. This is followed by lack of transparency and accountability (n=104) in the benefit sharing processes. The third highest conflict sources mentioned was elite capture of benefits indicated by 93 respondents.

Figure 2: Sources of inter/intra-community conflicts arising from REDD+ benefits



8.1.2 Sources or risks of elite capture at the local level in REDD+ benefit sharing

According to the local people engaged in the focus group meetings in five study areas, different local elite groups have the potential to capture REDD+ benefits because of their position in the community setting or role in the REDD+ implementation processes as well as their rights regarding land or tree ownership. Among the local elite groups are Farmers groups; the local level governing bodies such as Area Council, Assemblyman and Unit committee; the Traditional Authority and registered tree planters as shown in Table 8. The respondents perceived each of these elite groups to have reasons for capturing the REDD+ benefits. For instance according to their position as landowners, the respondents perceived the Traditional Authorities to demand benefits from trees, which are on their land or even capture a huge part of the benefit since they already take timber royalties, so why not any other benefits which might come later. Besides the respective local elite groups' reasons of capturing REDD+ benefits, the study also indicated some strategies to minimize elite capture (Table 8).

Table 8: Reasons for capturing REDD+ benefits by local elites and means to minimizing capture

Local level elite group	Reasons for capturing REDD+ benefits	Means of minimizing elite capture
Traditional authority	By virtue of their position, landowners could demand that benefits from trees on their land be given to them or even capture a huge part of the benefit. Already, they take royalties, so why not any other benefits which might come later	Institute management committee with representatives from all relevant stakeholders to be part of the benefit sharing processes. Public knowledge of all stakeholders and percentage share in REDD+. Benefit sharing mechanism should be made transparent and the roles of the various groups clearly defined. Benefits should not be left with any local group to manage. In that case no one will be able to exert much influence.
Unit committee, area council and assemblyman	These groups of elites could claim more benefits since they are the main body responsible for ensuring the development and welfare of the community. They can use their power to influence the sharing of benefits.	
Farmers	The farmer groups are many and each would want to capture the benefits for its members alone and even the Chief farmer, who is the leader of all the farmers, may also, try to capture the benefits by virtue of his position	
Registered tree planters	Registered tree planters have registered their trees and invested in their trees. In this respect may assume that any money coming is as a result of their hard work and hence should be the one to decide how the money should even be shared	

8.1.3 Proposed structures to address REDD+ related conflicts at the lowest level

The focus group meetings revealed that conflict has always been part of the daily lives of local communities and often there are traditional setups, which see to their resolution. They therefore indicated that conflict management structures must be in place to safeguard the REDD+ process. Additionally, the conflict resolution process at the local level should adapt the existing traditional system of mediation at the chiefs' palace. According to the respondents the chiefs and leaders need support from the assemblyperson or the unit committee members. From the perspective of the respondents, they do not have to go to court or police station to get issues resolved. The views of the focus group respondents were also supported by the survey respondents where majority (80%) preferred the use of existing traditional conflict resolution mechanisms (Fig. 3). Other relevant conflict management modes mentioned were litigation, committee of enquiry, transparent and accountable system as well as education.

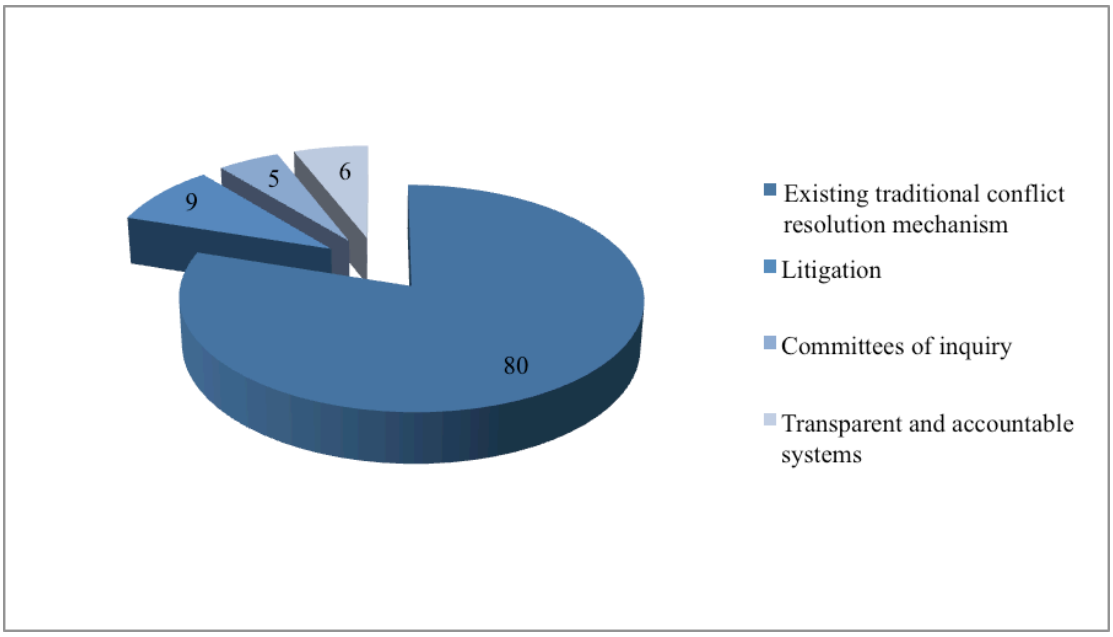


Figure 3: Views on REDD+ related conflict resolution mechanisms

When asked which stakeholder groups should be part of the conflict management structure, the focus group respondents indicated that the composition of such team should be made up of representatives of farmer groups, unit committee/ assemblyman, traditional authorities, the Forestry Commission, religious leaders and legal person from the government. Some of these stakeholders, according to the respondents, could play a specific role to facilitate in the conflict management processes. The Traditional Authority (i.e. chief and elders) must lead in the entire conflict management process with assistance from the unit committee/assembly person and the Forestry Commission official. In executing their task, the traditional authority should have a listening ear for the conflict parties without partiality in order to ensure that an equitable distribution of REDD+ benefits to the members as agreed upon are done. If the case is related to tree ownership, the traditional authority should be assisted by the committee, religious leaders and the Forestry Commission to visit the conflict area for verification likewise if the issue is related to land, there should be a committee of enquiry made up of representatives of farmer groups and other opinion leaders in the locality. In addition to supporting the traditional authority, the respondents also mentioned that the Forestry Commission needs to be in charge of the documentations and organization of meetings whiles the legal representative will help with legal issues.

Critique

REDD+ needs to be planned and implemented within a rigorous human rights framework that will ensure compliance with rights and safeguards. To ensure this, REDD+ should be subject to continuous monitoring, reporting and verification. In addition, there is a need for institutionalized mechanisms that will allow feedback, participation and complaints from local people and those acting on their behalf, in addition to others experiencing that their land and interests are threatened by REDD+. Such a system would allow early warning and timely feedback, and adjustments and continuous improvements of REDD+ plans and policies. As indicated in the empirical data, most of the potential inter/intra conflicts or risks mentioned by the local people are human rights as well as effective functioning of instruments or systems put in

place to foster free and fair sharing of benefits. Thus, carefully crafted formalized feedback mechanisms will increase transparency and accountability in REDD+. They will help underpin democratic and rights based processes, and contribute to improved forest governance.

There is the potential risks that funding for REDD+ activities, and land use planning will favour more powerful interests and political elites, and that decision-making processes may fail to establish the free, prior, informed consent of those affected. A devolution process is needed to empower communities in resource management: although an opportunity for a democratically decentralized approach to REDD+ may also represent new corruption risks if care is not taken. Table 6 explains some of these sentiments by the local people in their identification of potential local elites.

In applying subsidiarity in REDD+ programs we intend to acknowledge the relative supremacy of community laws in place of national laws in a sphere of absorption extending beyond the conflict. Furthermore, applying subsidiarity in REDD+ will open up for the country an additional exit possibility in all cases in which the national interest at stake outweighs the Community interest and in which a direct transfer of competences to the Community has not taken place. By this means, it will promote Community coherence, in the area of REDD+. If the issue of subsidiarity is taken as complementarity between national and local decision making processes, then the recommendations by the local people to use the existing traditional conflict resolution mechanisms with support from statutory actors have the potential to minimize conflicts at the local level. This however must operate in an environment which allows systems to work in a fair and transparent manner.

PART III

9. CONCLUSION, KEY GOVERNANCE GAPS AND RECOMMENDATIONS

9.1 Conclusion

The report has reviewed the current benefit sharing arrangements in Ghana's forest sector and its implication for REDD+ as well as assessed the inter-linkage between carbon rights and land/tree tenure. It has also discussed issues of elite capture, conflicts, safeguards and framework for addressing them. While drawing on the lessons and experiences from the forest and mining sectors, management of local development funds, and results of desk and field studies, it proposes recommendations for addressing issues of land/tree tenure, derived and carbon rights, and benefit sharing mechanism (institutional arrangements, benefit sharing models) for REDD+ implementation.

In relation to tenure, the legally pluralistic governance system governing land tenure in Ghana and the vesting of naturally occurring timber trees in the State pose some difficulties for REDD+ implementation. For effective implementation of REDD+, land and tree ownership should be aligned while harmonization or legal integration of the two land tenure regimes (customary and statutory) is pursued. The existing tree tenure should be reformed such that ownership of naturally occurring timber trees are vested in persons or entities with management, exclusion and alienation rights to trees and land. To address the challenges that *derived right* holders (tenant farmers and sharecroppers) face in the implementation of REDD+, there should be strive toward legal documentation of tenancy or contract between tenant farmer/sharecropper and the landowner. The agreement should acknowledge the derived rights of the tenant or sharecropper and stipulates the formula for sharing REDD+ benefits between the landowner and the tenant farmer/sharecropper. This recommended approach would work out well if carbon rights were tied to bundle of rights (management, exclusion and alienation) exercise over trees or land. Delineation of carbon rights is not only critical for carbon trading but also important for sharing REDD+ benefits. The determination of who owns carbon at the local level is irrelevant if Ghana decides to take a 'national approach' toward the implementation of REDD+. Nonetheless, Ghana's adoption of the nested approach to REDD+ implementation makes it important to define carbon rights. Consistent with the proposed tree tenure reform where ownership of naturally occurring timber trees are vested in persons or entities with management, exclusion and alienation rights to trees and land, carbon should be defined as tied to sinks (trees, soil or land). Consequently, persons or entities that exercise the aforementioned range of rights would be vested with carbon rights.

With regards to REDD+ benefit sharing mechanism, the various institutions to deliver and manage REDD+ benefits under the proposed REDD+ benefit sharing mechanism include: *Multi-stakeholder Governing Body (MGB); Project Implementation Body (PIB); Independent Monitoring and Audit Group (IMAG); National Carbon Fund* and *REDD+ Registry*. The broad institutional set-up fashioned after a *nested approach* and description of role/functions and proposed membership of the institutions are proposed to guide the establishment of a benefit sharing mechanism for REDD+ implementation in Ghana. Three existing benefit sharing schemes and a fund-based benefit sharing scheme were recommended for adoption for REDD+ implementation. The existing benefit sharing models include CREMA, MTS and Commercial forest

plantation development benefit sharing. These benefit sharing models address elements of equity, effectiveness, co-benefits and safeguard measures that can support REDD+ benefit sharing mechanism. Under CREMA, actors have contributed to forest management and conservation by refraining from activities that contribute to forest degradation and deforestation such as farming and engagement in illegal logging in forest reserves and protected areas. Under MTS and Commercial forest plantation development models, degraded forest reserves are being restored by stakeholders (particularly famers). Community revolving fund as a fund-based benefit sharing scheme has the potential to supporting participating stakeholders in planting and maintenance of trees as well as support various economically viable income generating activities they undertake.

The potential of REDD+ funding to increase the value of standing forests may fuel already on-going conflicts over land ownership in forest areas. Hence, strong safeguards and formal complaint mechanisms linked to REDD+ would help ensure good results for all. The establishment of independent grievance and redress mechanisms at local and national levels would foster accountability and may help reduce conflicts among stakeholders. REDD+ conflict resolution process at the local level should adapt the existing traditional system of mediation at the Chiefs' palace. The Chiefs will need support from a conflict management team composed of representatives of farmer groups, unit committee/assemblyman, the Forestry Commission, religious leaders and a legal person from the government.

Ghana can envisage an effective implementation of REDD+ by addressing key governance gaps such as those relating to tenure, carbon rights, conflict/dispute resolution, accountability and transparency, and the various recommendations and other forest sector reforms.

9.2 key governance gaps and recommendations

9.2.1 Land/tree tenure, derived and carbon right

The legally pluralistic governance system governing land tenure in Ghana and the vesting of naturally occurring timber trees in the State poses some difficulties for REDD+ implementation. For effective implementation of REDD+, land and tree ownership should be aligned, while harmonization or legal integration of the two land tenure regimes (customary and statutory) is pursued. Also, the existing tree tenure should be reformed such that ownership of naturally occurring timber trees are vested in persons or entities with management, exclusion and alienation rights to trees and land. The implication is that holders of allodia and freehold land titles under customary land ownership would exercise ownership right over naturally occurring trees on their lands. This would incentivize critical stakeholders such as farmers and forest-adjacent communities to invest in forest management and conservation for effective implementation of REDD+.

Tenant farming arrangement does not specify how REDD+ benefits should be shared among tenant farmer and landowner or landlord. To address the challenges that *derived right* holders (tenant farmers and sharecroppers) face in the implementation of REDD+, there should be strive toward legal documentation of tenancy or contract between tenant farmer/sharecropper and the landowner. The agreement should acknowledge the derived rights of the tenant or sharecropper and stipulates the

formula for sharing REDD+ benefits between the landowner and the tenant farmer/sharecropper. This recommended approach would work out well if carbon rights were tied to bundle of rights (management, exclusion and alienation) exercised over trees or land. As such the landowner who enters a sharecropping arrangement or admits a tenant farmer would include a benefit-sharing component in the tenancy agreement.

There is no legal framework that governs carbon rights definition and allocation in Ghana. Ghana's adoption of the nested approach to REDD+ implementation makes it important to define carbon rights now. Consistent with the proposed tree tenure reform where ownership of naturally occurring timber trees are vested in persons or entities with management, exclusion and alienation rights to trees and land, carbon should be defined as tied to sinks (trees, soil or land). Consequently, persons or entities that exercise the aforementioned range of rights would be vested with carbon rights.

9.2.2 Benefit sharing mechanism and institutional framework

Generally, there is no explicit mechanism that exists for the distribution of REDD+ benefits in Ghana. The effectiveness of sharing REDD+ benefits depends in part on the ability of institutional framework established to govern the equitable distribution of REDD+ benefits and implementation of REDD+ policies and measures. A broad institutional framework fashioned after a *nested approach* is proposed to guide the establishment of a benefit sharing mechanism for REDD+ implementation in Ghana. The proposed framework makes use of existing structures and the setting-up of new ones. The feasibility of the benefit sharing mechanism should be assessed for possible adoption for implementation. The proposed *Community Revolving Fund* as a benefit sharing scheme for sharing REDD+ benefits and possibly other recommended schemes should be piloted to assess their feasibility and operational difficulties. Given the novelty of REDD+, benefit sharing agreements should be flexible and allow for necessary changes based on learning and practical experiences after implementation. Also, because REDD+ revenues are typically unstable over time, there should be room for reassessment of terms. In all, the necessary accountability and transparency provisions should be made to work so that the proposed benefit sharing mechanism would be trusted.

9.2.3 Social accountability and transparency

Issues of transparency and accountability should not be taken lightly in Ghana's REDD+ implementation. Transparency is often a necessity for the building of trust between parties. Opening books to internal and external controllers, the eyes of civil society and the public at large can make wonders in terms of increasing accountability. There are various social accountability tools that have been supported and developed by development agencies that could be used. These include, for example, expenditure tracking surveys, social audits, establishment of citizen hotlines or report cards. Moreover, transparency could be made mandatory for mangers and distributors of the *National Carbon Fund* such as *Multi-stakeholder Governing Body (MGB),* and *Project Implementation Body (PIB)* such that local fund transfers is conditional on full disclosure of the receipt and expenditure of funds of previously received amount. Measures to increase transparency in the management and distribution of benefits should go hand in hand with increasing the technical capacity of staff, NGOs, community groups and associations and others likely to be responsible for receiving REDD payments.

9.2.4 Conflict resolution/ Risks of elite capture at the local level

Instituting mechanisms of compliance and accountability: Experience over the years has shown that safeguards are ineffective without mechanisms in place to ensure compliance and accountability. Information systems design needs to be transparent and publicly accessible. This should include participatory and independent monitoring approaches and relevant quality information gathering tools to allow for tracking of how safeguards are addressed and respected. Local peoples' capacity needs to be built in this scope.

Establishing grievance mechanisms at different levels: Accountability/grievance mechanisms at local and national level must be instituted, acknowledged and embraced by all stakeholders. The mechanism at the national level must be independent, transparent, effective and accessible to local communities. Also, it is recommended to ensure that local communities' grievances can be addressed in cases where national level mechanisms are dysfunctional using subsidiarity principles as in the proposed conflict management structure at the local level by the respondents of the study.

Promoting independent conflict resolution mechanisms within national REDD+ frameworks: There is the need for independent conflict resolution mechanisms within national REDD+ frameworks that will help address and resolve conflicts between governments, communities, the private sector and other stakeholders. These could build on existing national institutions, such as the courts or human rights institutions, with necessary reform to ensure recognition of traditional laws and customary dispute resolution mechanisms. An independent complaints mechanism is important, provided it is easily accessible, empowers local communities and ensures they are able to assert their rights to access information and hold governments and other actors accountable.

Minimizing significant risks in REDD+ implementation processes:

a. Participatory approach to REDD+: the local communities should be made part of the decision process, thus calls for assessing and building their decision making needs to make them articulate and assertive in their deliberation of forest issues. This will also help achieve transparent and accurate access to information about forest resources and create a robust accountability system to the benefit of the local people.

b. Capacity building: Successful REDD+ programmes will require a concerted effort to strengthen government and non-government (especially community leaders) institutions through capacity building in the areas of effective management of forests, finances and to measure, report and verify forest carbon. However, this must be complemented by Conflict management skills as well as interpersonal skills such as listening, integrity etc. Capacity building should begin with an assessment of the human resource capacity in REDD+ fund recipient entities. This should be followed by support for adequate training and education programmes, where necessary, and for institutional reform that provides government officials with opportunities to receive remuneration based on merit. REDD+ Institutions should also be reformed to ensure greater stakeholder participation, such as formal positions on any decision-making body, freedom of access to information and

opportunity to provide input. The donor community should also support the design and implementation of UN-led capacity building programme focused on anti-corruption measures for REDD+ financial transactions.

c. Land tenure reform: Even though the issue of land tenure was not seen as a major risk by most of the respondents, there is however the need to clarify ambiguous land tenure issues to help minimize risks of land grabbing and the evictions of forest dependent communities. In particular, regularization of customary and traditional land rights will provide these communities with legal access and entitlement to use and exploit the forest they depend upon. Tenure reform should adhere to a rights-based approach, consistent with obligations under international human rights instruments, including the UN Declaration on the Rights of Indigenous Peoples. Donor governments should support community-led initiatives that seek to assert these rights, such as social mapping exercises and the development of community protocols.
d. Monitoring of REDD+ implementation: REDD+ will require broad-based monitoring capable of assessing performance and verifying reforms across a range of areas (including improvements in governance and social and environmental benefits). To build confidence and trust and to guard against vested interests, these monitoring systems should incorporate independent monitoring of REDD+ design and implementation, building on existing Independent Forest Monitoring practice should also include monitoring for unintended consequences like illegalities in forests use.

Preventing or minimizing inter/intra community conflicts:

a. Ensure fair and transparent participation: Fair and transparent selection of stakeholders to participate in any REDD+ management structure at the local level need to be during the conception, design, revision and development of the structures. Strategies such as awareness creation, training to promote equitable participation in community projects to limit dominant individualism and empowering marginalized people need to be organized. Monitoring and evaluation phase should involve all actors. Implement a systematic database for information sharing from local to national with sufficient, consistent and well managed resources.

b. Institute realistic benefit sharing arrangements
    - With respect to fiscal benefits, the following should be promoted: a) Develop projects that will benefit most people and this will have the potential to reduce forest illegalities; b) Develop framework that will regulate the management of fees; c) Define equalization of equitable sharing for communities and d) Certify social projects in communities. Similarly, the following need to be avoided: a) projects that do not reflect the will of the people and b) bureaucracy in management committee.
    - Agree on roles and responsibilities
    - Monitor all pilot cases as learning points

Employing the principle of subsidiarity in establishing conflict resolution structures: It is therefore proposed that in the implementation of REDD+, it is relevant to analyze the question whether the application of subsidiarity principle can render a convincing

solution to conflicts and outline solutions through traditional roles and accepting community laws as supreme. Prohibition found in applying subsidiarity provision must therefore be construed as applying in its strictest sense only to such national measures of which it can be said with a reasonable degree of certainty that they hinder the creation of conflicts. Subsidiarity will therefore be aimed at a situation that the community will take decisions based on the National interpretation but conforming to their local or traditional laws. Particularly, it cannot be claimed that the national interest at stake is of overriding importance. Although, in the case of REDD+, such a policy may thus qualify, under the circumstances, that the policy is not tempered with by Community law which is only extended as the circle of possible beneficiaries of this policy. This will the reduce conflict in the implementation of REDD+ and will devolve power to the community. Notwithstanding, all REDD+ issues must conform to the policy framework which the country has developed for REDD+.

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Annex A

Terms of Reference

Phase 1: Conduct an in-depth literature review, with a particular focus on:

a. Mapping institutional and legal framework for REDD+ implementation and recommendations
b. Linkages between carbon rights, and land and tree tenure and mechanisms on how to address the allocation of derived rights and their allocation (for tenant farmers and share croppers)
c. Review of current benefit sharing and incentive programs promoting forest management and conservation in Ghana
d. Lessons learned from other sectors, most particularly from the logging sector, the voluntary partnership agreement (VPA) process and mining sector and/or others;

Phase 2: Develop Options Paper on benefit sharing mechanisms and social accountability for Ghana taking into consideration the analysis conducted under Phase 1 and present an overall guidance on how to establish such benefit sharing arrangements, reflecting:

a. Different potential schemes for sharing benefits and how these would link to the proposed REDD+ Strategy options for Ghana;
b. Risks of elite capture at the local level;
c. The level of organization of communities and the administration at local level and how these benefit sharing schemes would fit into existing institutional structures specifically the traditional authorities;
d. Risks of inter- and intra-community conflicts arising from REDD+ benefits;
e. The experience with local development funds i.e. the Challenge Fund that has been proposed to support REDD+ pilots;
f. Key governance risks and recommendations for gaps to be addressed for a functional benefit sharing system;
g. Issues of conflict resolution reflecting on the following aspects
   - Propose structures such that conflicts related to REDD+ will be addressed at the lowest or most localized level appropriate.
   - Use principle of subsidiarity to establish conflict resolution structures

Phase 3: Undertake consultations on potential benefit sharing options with key stakeholders and prepare final report, including an Annex, which presents proposals for a national architecture of benefit sharing for REDD+ in Ghana. The proposal will place emphasis on risks and suggestions on how the Government can move forward in creating a national framework for sharing benefits from REDD+ regardless of the source of REDD+ financing and suggest locally-appropriate types of payments/compensation for REDD programs and projects.

Annex B
Preferred forms of REDD+ benefits (*Interviews/Focus group discussion*)

Results from interviews

Forms of REDD+ Benefits	Response (%)
Monetary	89.0
Non-monetary	7.0
Monetary/Non-monetary	4.0

Responses from Focus group discussion

Three different forms of benefits were discussed; monetary, non-monetary and monetary/non-monetary. Results from the discussion showed that, monetary benefits were generally preferred to the other forms of benefits. However, specific benefits were recommended for some potential beneficiaries:

- *Farmers:* monetary and non-monetary. Monetary benefits should take the much of the two forms of benefits.
- *Community:* non-monetary benefits. This would help minimize elite capture and ensure collective enjoyment of REDD+ benefits. Provision of market, school and clinics are various forms of non-monetary benefits that can be promoted.

Preferred forms of REDD+ benefit sharing models (*Interviews/Focus group discussion*)

Results from interviews

REDD+ Benefits Sharing schemes	Response (%)
Individual payment	73
Revolving fund	21
Trust fund	6

Responses from Focus group discussion

Three main payment schemes were discussed; Individual payment, Revolving fund and Trust fund. Results from the discussions indicate strong preference for individual payment schemes and fair preference for Fund-based payment schemes. Excerpts of some responses are given below:

- Individual payment schemes

"Individual payments should be used. An individual account is safe. Even if one has not withdrawn his or her money, there is still security and assurance that the funds will be available whenever the person presents him or herself for the money.

Monetary benefits should come directly from the fund source and be paid into individual accounts…

Individual payment will help. If you haven't received your money, you would still be sure of getting it later. The other options might end up creating problems. Even our local mechanism of pulling resources together and each member benefiting as the turns circulate often generates problems. So it will be better to give the monetary benefits to individuals through their designated accounts…"

- Fund-based payment schemes (Revolving Fund)

"The other could be that, we have a group account and the funds paid directly into the group account. Then the individuals could then be paid from the group account…

…we could nominate our own trusted representatives who could be signatories to a common account where all the money would be paid to and they will rather share the money amongst us.

…Trust fund will be easier for us. If we can get a common account that the money will be paid in and then each beneficiary could present some form of identification and collect his portion".