Introduction
As in other countries, there is strong interest in Ghana from the Government, NGOs and other stakeholders in developing Reduced Emissions from Deforestation and forest Degradation (REDD) projects or demonstration activities. In developing a portfolio of REDD – or now REDD plus - demonstration activities it is desirable that project selection be undertaken in a systematic way, resulting in a representative and balanced portfolio coherent with strategic and sectoral priorities. It is also vital to understand the legal, institutional and policy framework for REDD, in order to assess what complementary progress is needed at the ‘macro’ level.

A scoping study of REDD opportunities and constraints is also an important first step for strategically orientating the ‘Katoomba Ecosystem Services Incubator’ (or ‘Incubator’). The REDD Opportunities Scoping Exercise (ROSE) involved a two day meeting of key informants in Accra over 2-3 July 2009.

A tool to classify and prioritise potential REDD plus (and other forest carbon) projects, and to assess the legal and institutional framework for REDD, has been developed. This tool is applied before embarking on the costly process of feasibility analysis and to provide policy level inputs. It includes a ‘project type analysis’ that considers the market and programmatic potential of generic REDD project types, and provides inputs at the REDD policy or strategy level – Box 1 discusses the likely role of projects and policies in Ghana’s future REDD plus architecture.

Approach and methods
The ROSE meeting drew on an experienced and cross-sectoral ‘expert group’ which combined a strong knowledge of Ghana’s forests, deforestation and degradation (DD) drivers, legal, institutional and social issues, and the carbon market - the following institutions, as well as various consultants, participated: Forestry Commission (including Wildlife Division), Ghana Cocoa Board (COCOBOD); Ministry of Food and Agriculture, University of Ghana (Land Resources Centre), Tropenbos,

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the Sustainable Tree Crops Programme (STCP), Civic Response, NCRC, CARE and various consultants. Two participants were on the National REDD Steering Committee. The main stages undertaken by the ‘expert team’ were to:

- Classify a set of potential REDD project types based on the forest ecosystem type, deforestation/degradation (DD) drivers and the tenure basis;
- Agree on a set of criteria for ‘successful’ REDD projects, focusing on economic and technical viability, as well as allowing for co-benefits and policy priorities;
- Score the project types against the selected criteria;
- Select high potential project types based both on the scores and a more qualitative analysis of key constraints;
- Identify potential REDD project and policy responses;
- Undertake a brainstorm analysis of the legal and institutional gaps or issues which need to be tackled for REDD to move ahead for these project types.

Following the ROSE meeting, a small in-country team, including a lawyer with carbon finance expertise, is building on the initial legal and institutional constraints and opportunities analysis, and a consolidated ROSE report will be delivered by the end of 2009.

**Classification and initial listing of ‘project types’**

REDD abatement opportunities were classified by ‘project type’. This was defined as a combination of ecosystem, land tenure type and principal DD drivers. The group classified Ghana’s ecosystems initially into six types: wet evergreen high forest (found particularly in the Western Region); moist semi-deciduous high forest; upland high forest (also moist semi-deciduous); transition zone (mainly in Brong-Ahafo Region); Guinea savanna and woodlands of northern Ghana; and coastal savanna on Ghana’s southern coastal belt.

These were broken down by tenure type: production forest reserves; protected forest reserves; off-reserve areas (mainly trees on farms); and (potentially) community or “dedicated forests” and/or Community Resource Management Areas (CREMAs) in off-reserve areas. The main DD drivers for each combination of ecosystem and tenure type were then listed. In a second stage, the analysis was rationalised by eliminating ecosystems with fewer trees,
focusing on the most important DD drivers, and combining the DD drivers where they tend to act together or sequentially.

**Selection of criteria**

After discussing the criteria used in previous ROSE studies in Tanzania and Uganda, the group selected and used the following criteria for scoring the project types:

- Biomass or carbon levels of the ecosystem
- Size of forest blocks and/or aggregation potential
- Deforestation/degradation threat level or additionality
- Opportunity cost associated with alternative (to REDD) land use
- Clarity of land tenure
- Clarity of tree tenure / carbon property rights
- Probable leakage risk from a REDD project
- Likely permanence level
- Replicability (i.e., potential for scaling up to other similar areas)
- Adaptability to respond to the potential of emerging markets
- Level of community or poverty reduction co-benefits
- Compatibility with other livelihood activities
- Level of biodiversity co-benefits
- Potential for bundling (combining carbon payments with other PES)

**Selection of higher potential project types**

Each criterion was scored 1-3 with a higher score indicating a more viable or attractive project. Selection of higher potential project types was based mainly on the scores but also on further discussion of critical criteria, such as carbon or biomass levels, additionality, size/aggregation potential, tenure clarity and replicability, as well as strategic or policy importance. Table 1 presents eight higher potential ‘project types’ based on this process.

It was agreed that the main DD drivers in the high forest areas were tree crops (especially cocoa in Western Region), food crops and logging, with wildfire becoming important in the drier semi-deciduous areas. In the transition zone, the main DD drivers were wildfire, with charcoal/fuelwood as the second driver in off-reserve areas; in the Guinea savanna areas farming and charcoal were the main drivers.

Although these project types scored highest, they still face significant challenges, for example, high opportunity costs in high forest areas associated with cocoa, oil palm and current logging practices. Tree tenure was considered highly problematic in off-reserve areas unless CREMAs or community forests can be introduced – off-reserve areas without CREMAs or community/dedicated forests’ received the lowest scores of all project types due mainly to the tree tenure problem. Current tree tenure is that all naturally occurring trees are vested in

<p>| Table 1: Higher Potential REDD Project Types |</p>
<table>
<thead>
<tr>
<th>Ecosystem type</th>
<th>Tenure</th>
<th>Main DD driver(s)</th>
<th>Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wet evergreen HF</td>
<td>Protection FR</td>
<td>Tree/food crops + logging</td>
<td>38</td>
</tr>
<tr>
<td>Wet evergreen HF</td>
<td>Off-Reserve (CREMA/CF)</td>
<td>Tree/food crops + logging</td>
<td>41</td>
</tr>
<tr>
<td>Moist semi-decid. HF</td>
<td>Production/Protection FR</td>
<td>Logging + wildfire</td>
<td>39</td>
</tr>
<tr>
<td>Moist semi-decid. HF</td>
<td>Off-Reserve (CREMA/CF)</td>
<td>Tree/food crops + logging</td>
<td>40</td>
</tr>
<tr>
<td>Transition zone</td>
<td>Production/Protection FR</td>
<td>Wildfire</td>
<td>37</td>
</tr>
<tr>
<td>Transition zone</td>
<td>Off-Reserve</td>
<td>Wildfire + charcoal/fuelwood</td>
<td>39</td>
</tr>
<tr>
<td>Guinea savanna riverine woodlands</td>
<td>Off-Reserve</td>
<td>Farming + charcoal + wildfire + grazing + sawmilling</td>
<td>39.5</td>
</tr>
<tr>
<td>Guinea savanna other</td>
<td>Off-Reserve</td>
<td>Farming + charcoal/fuelwood</td>
<td>36.5</td>
</tr>
</tbody>
</table>

Abbreviations: HF = high forest; FR = forest reserve; CF = community forests; CREMA = Community Resource Management Area.
the state; farmers/landowners have the right to fell trees for agricultural or subsistence purposes, but not for economic purposes. Planted trees however belong to the person who plants them.

Land tenure was only considered problematic in the forest reserves of wet evergreen high forests in view of the long-term establishment of cocoa farms in state managed areas. Participants felt that in other situations it should be possible to resolve land tenure conflicts, e.g., between landowners and migrant tenant cocoa farmers. In most of Ghana, land is held under “allodial title” by the traditional authorities (chieftancies) in trust for the communities.

Identification of REDD policy and project responses
The expert group then identified potential REDD plus policy and project responses for each ‘project type’ (set out in more detail in Table 2). Key policy measures identified were:

- introduction of CREMAs and/or community/dedicated forests in off-reserve areas, since these represent a shift to increased local control and participation in natural resource management, increase the scope for farmer rights over trees, and provide a facilitating framework or platform to resolve land tenure issues;
- raising productivity and incomes on existing cocoa farms, including in degraded forest reserves, as well as raising farm income and livelihood alternatives in migrant source areas, while realizing that these initiatives alone may not be sufficient for REDD gains (e.g., the risk of increased in-migration when profitability increases);
- improved inter-institutional coordination, particularly in respect to cocoa farming in forest reserves, including greater involvement of traditional authorities (TAs);
- better law enforcement, particularly as regards logging in forest reserves;
- land use zoning, especially by District Assemblies.

- increased resourcing of wildfire prevention programmes;
- empowerment and support of District Assemblies and TAs (chieftancies) in the control of illegal or unsustainable resource management practices and via strengthening traditional or customary institutions and controls, including greater use of local by-laws (e.g., as in Wenchi District and elsewhere);
- creation of grazing or livestock corridors for ‘transhumant’ pastoralists who currently burn for grass regeneration, including the introduction of water holes and farming restrictions in these areas, possibly in return for a modest payment by pastoralists;
- the possibility of subsidies for herbicide use in high fire risk areas;
- a change in energy pricing policy to encourage LPG (but the opportunity cost could be high since LPG is exported).

Allowing for some overlap between policies and projects, project suggestions included:

- improving farming productivity/income and promoting alternative sustainable livelihoods, e.g., bee-keeping, including projects to raise cocoa farm income;
- once established, linking CREMAs and dedicated forests to social service providers;
- rehabilitation or enrichment of forest reserves in a range of situations;
- implementing wildfire prevention programmes, including community environmental education and improved incentives for fire volunteers;
- establishing grazing corridors in transition and savanna areas;
- working with TAs and District Authorities to promote sustainable charcoal systems in situations where current charcoal production is unsustainable.
Legal and institutional gaps analysis

The brainstorm around legal, policy and institutional constraints resulted in a list of legal issues requiring further research and analysis:

- uncertainty around carbon property rights, not yet addressed by the law;
- the pros and cons of CREMAs and dedicated forests in off-reserve areas, the circumstances in which each might be appropriate, the likely treatment of carbon property rights, the potential to influence the legislative processes, e.g., dedicated community forests have been discussed in the context of the Voluntary Partnership Agreement (VPA), all require clarification;
- when considering the design of REDD plus incentives, all laws impinging on land use, ownership and tenure require scrutiny;
- clarification of the right of the Minister of Lands and Natural Resources to abrogate concessions or Timber Utilization Contracts (TUCs) in favour of carbon.

The main institutional and policy constraints discussed were:

- Weak law enforcement, partly due to a lack of state presence on the ground and political interference, as well as weak accountability and transparency;
- The levels of inter-sectoral coordination necessary to tackle the main DD drivers;
- Weak or unclear benefit sharing arrangements - a key research area for equitable REDD;
- In the case of charcoal, the lack of a biomass energy policy of the Ministry of Energy, which is more focused on electricity (only 6% of Ghana’s energy is from electricity, the rest being biomass and LPG);
- Weak resourcing of District Assemblies (DAs), which could potentially incorporate REDD plus actions in their Natural Resource Management Plans;
- Lack of engagement of traditional authorities – both DAs and TAs could develop and enforce by-laws around sustainable/legal natural resource extraction.

Conclusions

This short report of a two day meeting is not intended as a comprehensive analysis of the policy, legal and institutional issues surrounding REDD plus in Ghana, nor does it claim to be representative of the multiple stakeholder interests at stake, but rather provides a basis for further discussion and analysis of potential REDD plus projects and policies, as well as providing an evidence-based platform for the Katoomba Incubator in Ghana. It also provides a basis for the in-country ROSE team to undertake further legal and institutional analysis, thereby clarifying key constraints and possibilities.

Some key issues and findings from the ROSE meeting were:

- Most participants agreed that a key REDD action in the high forest area, especially the Western Region, is to raise productivity and income on existing cocoa farms so that farmers have less need to extend their farms or abandon them for a new forest area;
- Outside forest reserves, the main hope is for the development of CREMAs or community forests in which there is more scope to resolve tenure issues and increase farmer or landowner rights over trees and thereby incentives for sustainable management; conversely there is little hope for REDD in the off-reserve high forest areas assuming a continuation of current tree tenure and institutional arrangements;
- There are currently key opportunities to influence CREMAs in the new draft Wildlife Bill as regards making it more REDD compatible, and to promote community/dedicated forests building on civil society engagement in the VPA discussions;
- The need to increase the engagement and role of district assemblies (DAs) and traditional authorities in REDD plus activities, including the potential to include REDD plus in the DA Natural Resource Management Plans;
- The importance of improved wildfire control in drier areas, and the potential for innovative approaches like grazing corridors in the savanna/transitional zones;
- The need for a more integrated energy policy incorporating biomass energy.

The discussions were however sanguine about the scale of the policy and institutional reforms required to tackle the underlying policy and governance drivers of forest degradation in Ghana, including how to create the high levels of inter-institutional/sectoral coordination and communication which are essential for REDD plus in a predominantly agricultural landscape.
<table>
<thead>
<tr>
<th>Forest type</th>
<th>Tenure</th>
<th>DD drivers</th>
<th>Policy measures</th>
<th>Projects</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>High forest - wet evergreen</strong></td>
<td>Production FR</td>
<td>Tree/food crops</td>
<td>Support to established cocoa farms in some production FRs; law enforcement; inter-institutional coordination (including with traditional authorities (TAs) and farmers)</td>
<td>Raise productivity/income on <em>existing</em> cocoa farms via agroforestry, new crops, timber trees, etc. (but concern that this would attract migrants and increase on reserves)</td>
</tr>
<tr>
<td></td>
<td>Off-Reserve (CREMAs/CFs)</td>
<td>Tree/food crops &amp; logging</td>
<td>Introduce CREMAs/CFs; revise laws re rights to trees; develop agreements between landowners &amp; tenant farmers</td>
<td>Raise productivity and income in CREMA areas; work with TAs to improve customary control/institutions; link CREMAs/CFs to social service providers</td>
</tr>
<tr>
<td><strong>High forest – moist semi-deciduous</strong></td>
<td>Production/Protection FR inc. Uplands</td>
<td>Wildfire / logging</td>
<td>Law enforcement - illegal logging</td>
<td>Implement wildfire protection programs (inc. education); rehabilitation of degraded areas (inc. enrichment); alternative livelihoods in Production Forest Reserves</td>
</tr>
<tr>
<td></td>
<td>Off-Reserve (CREMAs/CFs)</td>
<td>Tree/food crops &amp; logging</td>
<td>Same as wet evergreen off-reserve areas</td>
<td>Same as wet evergreen off-reserve areas</td>
</tr>
<tr>
<td><strong>Transition zone</strong></td>
<td>Production/Protected FR</td>
<td>Wildfire</td>
<td>Empower DAs and TAs to pass and enforce by-laws; create grazing corridors for pastoralists; subsidise herbicides (?)</td>
<td>Wildfire prevention programs; incentives for fire volunteers; community environmental education (e.g. to counter 'security' problems of 'high grass' as a cause of burning)</td>
</tr>
<tr>
<td></td>
<td>Off-reserve</td>
<td>Wildfire &amp; charcoal / fuelwood</td>
<td>Ministry of Energy policies on energy pricing - subsidise LPG (currently 4 x cost of charcoal); use LPG in schools; recognize professional charcoal makers</td>
<td>Work with DAs &amp; TA to encourage sustainable charcoal (woodlots; rotation/concession basis); improved kiln technologies; research to improve stove technologies</td>
</tr>
<tr>
<td><strong>Guinea savanna - riverine woodlands</strong></td>
<td>Off-Reserve</td>
<td>Farming + charcoal + wildfire, etc</td>
<td>Land-use planning: demarcate into zones and introduce CREMAs (shift to local control); improved law enforcement</td>
<td>Fire control measures; grazing corridors; improved farming productivity/income; alternative livelihoods, etc.</td>
</tr>
<tr>
<td><strong>Guinea savan. – other woodlands</strong></td>
<td>Off-Reserve</td>
<td>Farming + charcoal / fuelwood</td>
<td>Same as Guinea savanna riverine woodlands</td>
<td>Same as Guinea savanna riverine woodlands</td>
</tr>
</tbody>
</table>
The Family of Forest Trends Initiatives

**Ecosystem Marketplace**
A global platform for transparent information on ecosystem service payments and markets

**The Katoomba Group**
Building capacity for local communities and governments to engage in emerging environmental markets

**BBOP**
Business and Biodiversity Offsets Program, developing, testing and supporting best practice in voluntary biodiversity offsets

**MARES**
Using innovative financing to promote the conservation of coastal and marine ecosystem services

**Chesapeake Fund**
Building a market-based program to address water quality (nitrogen) problems in the Chesapeake Bay and beyond

**Forest Trade & Finance**
Bringing sustainability to trade and financial investments in the global market for forest products