A LEGAL AND INSTITUTIONAL POLICY FRAMEWORK
FOR SUSTAINABLE MANAGEMENT OF FOREST RESOURCES
IN SOUTHERN SUDAN

A POLICY NOTE

February 2010

Environment and Natural Resources Management
Sustainable Development Department
Africa Region
Table of Contents

Abbreviations and Acronyms ........................................................................................................ iii

EXECUTIVE SUMMARY .............................................................................................................. v

A. Background and Introduction ................................................................................................ 1
A.1 Contextualizing Forestry Sub-regionally and Nationally .................................................... 1
A.2 Contribution of Forest Resources to Local Livelihoods ....................................................... 2
A.3 Impacts of the Civil War ...................................................................................................... 3
A.4 Forest Governance: Key Issues ........................................................................................... 4
A.5 Overview of Forest Resources in Southern Sudan ............................................................... 5

B. Strategies for Effective Conservation and Management of Southern Sudan’s Forest Resources 7
B.1 Strengthening the Forest Resource Information and Knowledge Base ................................. 7
B.2 Developing a Coherent Legislative and Policy Framework, Organizational Structure, and Capacity for the Sector ................................................................................................................ 9
B.3 Promoting Participatory Forest and Woodland Management ............................................ 14
B.4 Enabling Forest-Based Industries to Thrive ........................................................................ 16
B.5 Creating an Enabling Environment for Attracting Private Sector Investment .................... 19
B.6 Protecting and Enhancing Forest-Related Environmental Services .................................. 22
B.7 Using Technical Approaches to Conservation and Sustainable Management of Forest Resources ....................................................................................................................................... 24
B.8 Introducing Predictable and Sustainable Long-term Financing Mechanisms ..................... 25

C. Summary ................................................................................................................................. 26

D. Possible Next Steps ................................................................................................................ 28

Annex 1: Forest Legal and Policy Framework in Southern Sudan ................................................ 29
Annex 3: Southern Sudan Forestry Organizations ...................................................................... 43
Annex 4: Summary of the Southern Sudan Land Act of 2009 ...................................................... 46
Annex 5: Suggested Criteria for Enhancing the Prospects for Successful Engagement with Local Communities ......................................................................................................................... 48
Annex 6: Community-based Management Experiences from Tanzania and Zimbabwe ........... 50
Annex 7: Ongoing Company/Community/Smallholder Partnership-Based Approaches to Sustainable Forest Management from Ghana and South Africa ......................................................... 53
## Abbreviations and Acronyms

<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Full Form</th>
</tr>
</thead>
<tbody>
<tr>
<td>CIF</td>
<td>Climate Investment Fund</td>
</tr>
<tr>
<td>CFR</td>
<td>Central Forest Reserves</td>
</tr>
<tr>
<td>COP</td>
<td>Conference of Parties</td>
</tr>
<tr>
<td>CPA</td>
<td>Comprehensive Peace Agreement</td>
</tr>
<tr>
<td>CPF</td>
<td>Collaborative Partnership on Forests</td>
</tr>
<tr>
<td>CTA</td>
<td>Civil Transactions Act</td>
</tr>
<tr>
<td>DRC</td>
<td>Democratic Republic of Congo</td>
</tr>
<tr>
<td>FAO</td>
<td>Food and Agriculture Organization</td>
</tr>
<tr>
<td>FCPF</td>
<td>Forest Carbon Partnership Facility</td>
</tr>
<tr>
<td>FD</td>
<td>Forestry General Directorate</td>
</tr>
<tr>
<td>FIP</td>
<td>Forest Investment Program</td>
</tr>
<tr>
<td>FLEGT</td>
<td>European Union Forest Law Enforcement Governance &amp; Trade</td>
</tr>
<tr>
<td>FNC</td>
<td>Forests National Corporation</td>
</tr>
<tr>
<td>GoNU</td>
<td>Government of National Unity</td>
</tr>
<tr>
<td>GoSS</td>
<td>Government of Southern Sudan</td>
</tr>
<tr>
<td>ICRAF</td>
<td>International Center for Research into Agroforestry/World Agroforestry Center</td>
</tr>
<tr>
<td>IDP</td>
<td>Internally Displaced Person</td>
</tr>
<tr>
<td>ITTO</td>
<td>International Tropical Timber Organization</td>
</tr>
<tr>
<td>KFTC</td>
<td>Kagelu Forestry Training Centre</td>
</tr>
<tr>
<td>LRSIU</td>
<td>Land Resource Survey and Information Unit</td>
</tr>
<tr>
<td>LSRO</td>
<td>Land Settlement and Registration Ordinance</td>
</tr>
<tr>
<td>MAF</td>
<td>Ministry of Agriculture and Forestry</td>
</tr>
<tr>
<td>MARF</td>
<td>Ministry of Animal Resources and Fisheries</td>
</tr>
<tr>
<td>MCRD</td>
<td>Ministry of Cooperatives and Rural Development</td>
</tr>
<tr>
<td>MDB</td>
<td>Multilateral Development Bank</td>
</tr>
<tr>
<td>MDTF</td>
<td>Multi-Donor Trust Fund</td>
</tr>
<tr>
<td>MHPP&amp;E</td>
<td>Ministry of Housing, Physical Planning &amp; Environment</td>
</tr>
<tr>
<td>MWCT</td>
<td>Ministry of Wildlife Conservation and Tourism</td>
</tr>
<tr>
<td>MoFEP</td>
<td>Ministry of Finance and Economic Planning</td>
</tr>
<tr>
<td>NFIRS</td>
<td>National Forest Income Retention Scheme</td>
</tr>
<tr>
<td>NFDF</td>
<td>National Forest Development Fund</td>
</tr>
<tr>
<td>NFR</td>
<td>National Forest Reserve</td>
</tr>
<tr>
<td>NTFP</td>
<td>Non-Timber Forest Product</td>
</tr>
<tr>
<td>ODA</td>
<td>Official Development Assistance</td>
</tr>
<tr>
<td>PES</td>
<td>Payments for Environmental Services</td>
</tr>
<tr>
<td>PFR</td>
<td>Provincial Forest Reserves</td>
</tr>
<tr>
<td>REDD</td>
<td>Reducing emissions from deforestation and forest degradation</td>
</tr>
<tr>
<td>SAFDP</td>
<td>Support to Agriculture and Forestry Development Project of the MDTF</td>
</tr>
<tr>
<td>SCF</td>
<td>Strategic Climate Fund</td>
</tr>
<tr>
<td>SFM</td>
<td>Sustainable forest management</td>
</tr>
<tr>
<td>SMAARI</td>
<td>State Ministry of Agriculture, Animal Resources and Irrigation</td>
</tr>
<tr>
<td>SMEs</td>
<td>Small and medium enterprises</td>
</tr>
<tr>
<td>Acronym</td>
<td>Description</td>
</tr>
<tr>
<td>---------</td>
<td>--------------------------------------------------</td>
</tr>
<tr>
<td>SPLM</td>
<td>Sudan People’s Liberation Movement</td>
</tr>
<tr>
<td>SSARP</td>
<td>Southern Sudan Agriculture Revitalization Program</td>
</tr>
<tr>
<td>SSFC</td>
<td>Southern Sudan Forest Corporation</td>
</tr>
<tr>
<td>SSFF</td>
<td>Southern Sudan Forest Fund</td>
</tr>
<tr>
<td>SSLA</td>
<td>Southern Sudan Legislative Assembly</td>
</tr>
<tr>
<td>SSLC</td>
<td>Southern Sudan Land Commission</td>
</tr>
<tr>
<td>SRRC</td>
<td>Sudan Relief and Recovery Commission</td>
</tr>
<tr>
<td>STEP</td>
<td>Sudan Transitional Environment Program</td>
</tr>
<tr>
<td>SWG</td>
<td>Sector Working Group</td>
</tr>
<tr>
<td>TFD</td>
<td>The Forest Dialogue</td>
</tr>
<tr>
<td>ULA</td>
<td>Unregistered Lands Act</td>
</tr>
<tr>
<td>UN</td>
<td>United Nations</td>
</tr>
<tr>
<td>UNEP</td>
<td>United Nations Environment Programme</td>
</tr>
<tr>
<td>USAID</td>
<td>United States Agency for International Development</td>
</tr>
<tr>
<td>VPA</td>
<td>European Union Voluntary Partnership Agreement</td>
</tr>
</tbody>
</table>
EXECUTIVE SUMMARY

A LEGAL AND INSTITUTIONAL FRAMEWORK FOR
SUSTAINABLE MANAGEMENT OF FOREST RESOURCES IN SOUTHERN SUDAN

A POLICY NOTE

BACKGROUND

i. This Policy Note was prepared in response to a request from the Government of Southern Sudan (GoSS) for World Bank assistance in developing legislative and institutional policies and strategies that will take advantage of the potential of the region’s forest resources to contribute to poverty alleviation, food security, sustainable agriculture, economic growth, and to protection of forest-related environmental services such as climate, biodiversity, water, and wildlife resources.

ii. The Note is intended to: (a) take stock of the current situation on the ground, including identifying the legislative, institutional, governance, and policy reforms needed to create an enabling environment for both public- and private-sector investment. This should help in contributing to improved understanding of the currently underutilized potential of Southern Sudan’s forest resources; (b) analyze what has worked and what has not worked prior to and since the signing of the Comprehensive Peace Agreement (CPA); and (c) suggest priority solutions and actions towards revitalizing the forestry sector.

iii. An overriding conclusion of this Note is that Southern Sudan’s forest resources constitute a "latent wealth" that has the potential to make a very major contribution to economic recovery and poverty reduction at the local community level.

Forest Benefits

iv. At the level of the household, Southern Sudan forests contribute to all aspects of life by providing forest foods in the form of tree leaves, wild fruits, nuts, tubers and spices; hunting areas for game, grazing, and browsing; fodder, fuelwood, and charcoal; traditional medicines, construction materials, and household and farm items. In addition, particularly for rural people, these forests comprise faunal and floral species as well as water bodies that provide many more intangible benefits such as cultural and belief symbols (totems and taboos), ritual artifacts, and sacred sites. Rural communities derive consumptive benefits by trading in non-timber forest products such as gum, honey, palm oil, lulu (shea oil and butter), etc. Forest-based industries (sawmilling, wood-based panels, furniture, and joinery manufacture) are a significant source of off-farm employment. Throughout Southern Sudan agroforestry-based farming systems play a key role in contributing to poverty alleviation, improved crop productivity, and sustainable agriculture. The forests of Southern Sudan also provide important environmental services, including climate amelioration and protection of biodiversity, water, and wildlife resources.
Given the wide range of benefits it is clear that forest resources have the potential to make a major contribution to improved human welfare and to the reconstruction and socio-economic recovery of Southern Sudan.

**Southern Sudan’s Forest Resources**

v. The GoSS Ministry of Agriculture and Forestry (MAF) estimates that the natural forests and woodlands of Southern Sudan total about 190,000 km$^2$, or about 29 percent of the total land area (see map on page 6). Of that total, forest reserves comprise 17,500 km$^2$. Plantations, consisting largely of teak, cover about 1,900 km$^2$. These plantations were extensively degraded during the years of conflict.

**Impacts of the Civil War**

vi. The civil war very negatively impacted forest management and forest development. It led to a total breakdown of forest institutions and forest governance regimes as well as reduced capacity of forest administrations and traditional governance systems to influence forest development.

**KEY POLICY ISSUES ADDRESSED IN THIS NOTE**

vii. The issues discussed in this Note cover strategies for:

1. Strengthening forest resource information and knowledge base;
2. Developing a coherent legislative and policy framework, organizational structure, and capacity for the sector;
3. Promoting participatory forest and woodland management;
4. Enabling forest-based industries to thrive;
5. Creating an enabling environment for attracting private-sector investment;
6. Protecting and enhancing forest-related environmental services;
7. Using technical approaches to conservation and sustainable management of forest resources; and
8. Introducing predictable and sustainable long-term financing mechanisms.

viii. The Policy Note focuses in particular on issues relating to improvements in forest governance. It reviews strengths and weaknesses of existing institutions and mechanisms for decision-making. Special emphasis is given to policies and strategies for decentralization of forest management responsibilities and for engagement of local communities and the private sector. It highlights the importance of policy reforms needed to address politically difficult issues, such as uncertain land tenure and conflicting institutional arrangements for overall forest conservation and management to support GoSS strategies for protection of forest-related environmental services.
Annex 1 of this Note summarizes the current forest policy framework, giving special reference to the 2007 Forest Policy Framework. Annex 2 provides a summary of recent Policy Statements that define the responsibilities of the Ministry of Agriculture and Forestry (MAF). Annex 3 provides information on the current status of both government and local community forest-related organizations. Annex 4 summarizes the recommendations of the recently introduced 2009 Land Act. Some suggested criteria and experiences for enhancing the prospects for successful engagement with forest communities are given in Annexes 5 and 6. Annex 7 describes examples of private sector-community partnerships in sustainable forest management (SFM), while Annex 8 provides examples of a financing framework (carbon payments) for forestry development. Summaries of the eight key issues addressed in this Note are presented below:

(1) **Strengthening the Forest Resource Information and Knowledge Base**

The main issue discussed in this section is how to strengthen and accelerate the arrangements that the MAF is currently putting in place to assemble more accurate and reliable data on the extent and nature of the forest and woodland estate for forest management planning.

Current MAF strategies aim to ensure that there is an institutionalized system of natural resource management and organized forest planning processes for the collection and dissemination of comprehensive and accurate data and information to decision makers. To this effect MAF has received some funding from the Government of Norway for the establishment of a *Land Resource Survey and Information Unit (LRSIU)*. That Unit is developing methodologies and systems for forest resource assessment of plantations and natural forests and for implementation of forest inventories initially in selected pilot areas in three states. Special emphasis is therefore being given in the short-term to assembling data on the status of forest resources, including zoning and boundary mapping in the five categories of forest land use types, namely customary, protection, production, plantation, and agroforestry.

In the long-term, the LRSIU support in this area will extend to: (i) an assessment of non-timber forest products and capacity of forests to provide environmental services such as watershed protection, carbon sequestration, and ecotourism; (ii) an assessment of the regenerative capacity of forests; (iii) an assessment of community livelihood dependencies; and (iv) capacity to manage forests, provide extension services, and train future resource managers and collaborators.

(2) **Developing a Coherent Legislative and Policy Framework, Organizational Structure, and Capacity for the Sector**

The main issues addressed in this section are:

- How to reconcile conflicting interpretations of the numerous forest statues, forest laws, and policies that have been introduced during the last 25 years;
b) How to shift the emphasis from a former, highly centralized approach of forest conservation and management, to one that fully engages local communities and small holders;

(c) How to create an enabling environment for engaging the private sector;

d) How to clarify the respective roles of the many different government, community-based, and private-sector agencies that have assumed responsibility for various elements of the GoSS forest conservation and development strategy, and how most effectively to support the ongoing efforts of GoSS and the MAF to achieve more effective integration between their activities;

e) How to mobilize the financial resources that will be needed to develop the institutional capacity to support the major program of community and private sector-based approaches currently in the planning stage; and

f) Assessing how appropriate current forest education, training, and research curricula are, and whether there is a need for an adjustment to reflect changing perceptions of how to achieve effective forest conservation and development.

xiv. A plethora of forest statutes introduced over the last twenty years and the perpetuation of the highly centralized "command-and-control" approaches adopted by the state have contributed towards the extreme marginalization of other actors, thereby constraining effective conservation and development of forest resources of Southern Sudan. Now, GoSS is focused on pursuing possibilities for decentralization of forest management responsibilities. Two recent enactments, namely the Forest Policy Framework of 2007 and the Land Act of 2009, contain provisions that promote the gradual shifting of responsibilities for forest protection and management in a partnership scheme to local administrations, responsible private sector, local communities, and on-farm smallholders. GoSS will maintain overall oversight functions for policy and legislative directions.

xiv. In pursuing the objective of enabling full inclusion and participation of all actors, GoSS has taken the first step of initiating active discussion to clarify the respective roles and responsibilities of a number of ministries at the GoSS level. Other organizations, whose roles and responsibilities will need to be clarified, include the Southern Sudan Land Commission (SSLC), the Forest National Corporation (FNC) at the Government of National Unity (GoNU) level, the proposed Southern Sudan Forest Corporation (SSFC), and the Kagelu Forestry Training Centre (KFTC).

xv. The Policy Note includes recommendations for streamlining and improving integration of these various public-sector, quasi-government, and private-sector institutions. It also suggests opportunities for improving the civil service incentive framework and the need for a clearly defined plan for enhanced human resource development of the next generation of forest managers and practitioners. The Note emphasizes the need also to ensure that formal training includes special reference on the current status of knowledge on emerging issues such as climate change, market-based instruments (e.g. payment for environmental services), concession management, and eco-labeling.

xvi. Critical research areas should include the development of actionable governance indicators that could be used to measure the baseline situation and to monitor progress as various
reforms are undertaken. In this regard, a good reference is the "Roots for Good Governance - An Analytical Framework for Governance Reforms" developed by the World Bank. The Policy Note emphasizes the need to coordinate governance reforms in the forest sector with broader governance reforms, which may be under implementation in the economy, and to leverage the "extra-sectoral" opportunities to bring about changes in the forest sector.

(3) Promoting Participatory Forest and Woodland Management

xvii. The two key questions discussed in this Section are:

   a) **How to create an enabling and legislative framework for engaging local governments and communities in forest conservation and management; and**

   b) **What Southern Sudan can learn from the experiences of other African countries that have already been testing community-based approaches to manage of government-owned and -controlled forest resources.**

xviii. Given that about 90 percent of forests in Southern Sudan lie outside gazetted forests, involving traditional authorities and their communities will be a crucial step towards effective forest conservation and management. Policy Statement No. 6 of the 2007 Forest Policy Framework and the 2009 Land Act acknowledged the pivotal importance of community participation to ensure sustainable forest management and its potential to generate an increased stream of benefits.

xix. Decentralized forest management institutional structures that fully take into account local peoples’ and communities’ interests are being widely promoted and adopted in other African countries. This Note cites lessons learned of potential relevance to Sudan from experiences of participatory management in countries such as Tanzania and Zimbabwe that show the benefits when community interests go beyond just user interests to include their active participation, custodian, and guardianship interests.

(4) Enabling Forest-Based Industries to Thrive

xx. The main issues discussed in this Section are:

   a) **What is the current status of the many hundred small- and medium-sized chainsaw and sawmilling enterprises that were established during the Civil War?**

   b) **What role does government play in the ownership and operation of forest-based industries?**

   c) **What progress is being made towards the establishment of larger scale sawmilling/wood-based and panel-based companies/plants that have been allocated long-term concession rights and have committed to manage specific areas of government-owned forests?**

   d) **What are MAF strategies for improved revenue capture and distribution?**

xxi. Today many of the small operations established during the war remain dysfunctional. Small and medium village-level sawmilling, furniture, and joinery manufacturing enterprises (SMEs) have the potential to make a very significant contribution to rural employment and
income generation. There is much potential in Southern Sudan for developing strategies and implementing action plans for upgrading the technical quality of processed products, exploring new market opportunities, upgrading business management efficiency, and attracting commercial investment. Uganda and Mozambique provide valuable lessons in this regard.

xxii. In 2006 a Ministerial Directive was issued, banning the extraction of timber from all types of forests in Southern Sudan. This ban remains in force. As one possible option for immediate action, the GoSS has been discussing the possibility of introducing an interim permit system with associated harvesting measures that could include, for instance, establishing a minimum girth diameter, pre-marking and post-inspecting trees by forest officers, specifying which species can be felled, requesting placement of bond by a permit holder, defining the number of years after which a coupe could be revisited, setting quotas, and deploying log conveyance certificates.

xxiii. Large-scale commercial timber harvesting and processing activities are limited in Southern Sudan. Currently, only two long-term timber concessions have been granted by GoSS to the Equatoria Teak Company and the Central Equatoria Teak Company for extraction of teak in the Loka, Korobe, and Kajiko North teak plantations for large-scale integrated sawmilling and wood-based panel production. Both companies have committed to financing the management and expansion of degraded teak plantations and to investment in new plantations. Once the moratorium on logging is lifted, there could be potential to attract other large-scale investors, subject to their willingness to accept independent certification.

xiv. To meet the growing domestic demand for wood products, substantial volumes of processed timber products are currently being imported from neighboring countries such as Kenya, Uganda, and the Democratic Republic of Congo (DRC). The unmet domestic demand is, however, being met largely from illicit harvesting of timber from older teak and eucalyptus plantations and to a lesser extent from the natural forests.

xxv. The forest revenue system in use is unworkable, despite the fact that the 2004 Timber Utilization Act and the 2004 Forestry Commission Act were enacted to ensure the forest fiscal system was efficient and effective. The reasons contributing to this deplorable state include: (a) a low collection capacity; (b) poor accounting and failure by revenue collection staff to remit whatever little is collected to the GoSS treasury; (c) confusion about who actually has responsibility for revenue collection; (d) lack of coordination among the collection entities; (e) unrealistically low price, fees, and charges levels that were set and that failed to consider cost elements related to management, production/protection, transportation, and product processing; and (f) the lack of clarity on how revenues were to be shared among actors.

xxvi. In the past taxes were levied on exported logs and processed timber (i.e. volume-based), resulting in wasteful resource extraction. The MAF’s intention is to devise a taxation system that will promote sustainable forest management, increase local processing, facilitate tax collection, share forest rents (as referenced in the new 2007 Forest Policy Framework), and improve governance and transparency in the forest sector.
Neither the 2006 Ministerial Order nor the 2007 Forest Policy Framework cede any share of the revenues to local communities directly (see Table 1), thus running counter to the commitment made in the 2007 Forest Policy Framework to shift the responsibility for forest management to local communities and to ensure that they become major beneficiaries of forest harvesting derived revenues. For now, it is not clear who holds the authority to disburse money from the National Forest Development Fund (NFDF).

### Table 1: Current arrangements for forest revenue sharing in Southern Sudan

<table>
<thead>
<tr>
<th>Source/Ownership</th>
<th>Beneficiaries - Proportional Distribution (Percent)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>GoSS</td>
</tr>
<tr>
<td>Central Forest Reserves (CFRs)</td>
<td>70</td>
</tr>
<tr>
<td>Provincial Forest Reserves (PFRs)</td>
<td>30</td>
</tr>
<tr>
<td>County Council &amp; Community Forests</td>
<td>Nil</td>
</tr>
<tr>
<td>Other natural forests &amp; woodlands</td>
<td>Nil</td>
</tr>
</tbody>
</table>

(5) Creating an Enabling Environment for Attracting Private-Sector Investment

Key questions addressed in this section are:

- **a)** How to introduce transparent long-term concession allocation polices that will provide incentives for private sector investment;
- **b)** How to maximize the possibilities for developing mutually beneficial partnerships between large private-sector companies, local communities, and smallholders; and
- **c)** How to increase support for small- to medium-scale forest-based processing industries.

As an important step towards attracting responsible private-sector investment, the MAF has been developing a strategy that would ensure long-term concession rights linked to voluntary adoption by forest industrial companies of sustainable harvesting measures and independent certification. MAF is in the process of developing transparent market-based instruments and a regulatory framework for allocating timber harvesting contracts. Within the medium- to long-term, certification and eco-labeling systems, such as the EU-supported Voluntary Partnership Agreement (VPA) already adopted in Ghana, could be tested in Sudan. The MAF role would be one of encouraging certification by providing the right incentives for adoption of transparent certification processes.
xxx. This Note recommends that the introduction of collaborative forest management in Southern Sudan should initially be on an experimental basis. The challenges will be to combine continued oversight of forest management by the MAF with financial and other incentive policies that will provide the necessary inducement to engage local communities. On the company-community partnership front, private-sector experiences in Northern Sudan are highly relevant. Annex 6 provides lessons learned from company-community partnerships being tested in some other African countries. A key issue that will need to be addressed is how to strengthen the bargaining capacity of low-income communities that are seeking opportunities to benefit from such partnerships.

(6) Protecting and Enhancing Forest-Related Environmental Services

xxx. The key question addressed in this section is how Southern Sudan could take advantage of the various financial mechanisms that are being introduced that could provide significant grant funding for protection and enhancement of forest-related environmental services.

xxxii. Deforestation and degradation are the second leading cause of global warming, accounting for approximately 18 percent of global greenhouse gas (GHG) emissions and more than a third of emissions from developing countries. The Bali Action Plan calls for consideration of policy approaches and positive incentives on issues relating to reducing emissions from deforestation and forest degradation in developing countries, and the role of conservation, sustainable management of forests, and enhancement of forest carbon stocks in developing countries. The Conference of Parties (COP) that met in Copenhagen in 2009 has considered ensuring long-term incentives to facilitate forest-related climate change mitigation in developing countries.

xxxiii. An important objective of the Strategic Climate Fund (SCF) is to maximize co-benefits of sustainable development, particularly in relation to the conservation of biodiversity, natural resources, ecosystem services, and ecological processes. At COP 15 in Copenhagen, the World Bank announced the establishment of a Forest Investment Program (FIP) under the SCF to catalyze policies and measures and mobilize significantly increased funds to facilitate the reduction of deforestation and forest degradation and to promote improved sustainable management of forests, leading to emissions reductions and the protection of forest carbon stocks. Southern Sudan could greatly benefit from ongoing multilateral and bilateral efforts to prepare towards reducing emissions from deforestation and forest degradation (REDD).

xxxiv. Southern Sudan’s forest resources play a vital role in climate mitigation and preservation of biodiversity, watershed and wildlife resources. They could potentially benefit by mobilizing payments for environmental services (PES) and climate change-related financial support through mechanisms such as the Forest Carbon Partnership Facility (FCPF), the Climate Investment Fund (CIF), the Forest Investment Program (FIP), and through carbon credit schemes that are likely to be available beyond 2012. Currently, key organizations such as the multilateral development banks (MDBs), the United Nations (UN), members of the Collaborative Partnership on Forests (CPF), bilateral aid programs, international NGOs, philanthropic organizations, and the private sector seem keen to facilitate emission reduction programs in developing countries.
(7) Using Technical Approaches to Conservation and Sustainable Management of Forest Resources

Key questions are how Southern Sudan could benefit from the extensive analyses, practical experiences, and guidelines developed by agencies such as ITTO, FAO, ICRAF, and The Forest Dialogue (TFD) for promoting adoption of best management practices.

Historically, in Southern Sudan, timber harvesting in indigenous forests was closely regulated to avoid misuse, and only few species were harvested. However, as far back as the early 1920s, the Government of Sudan had recognized the need to augment the timber supply from natural forests and commenced establishing plantations, initially of species such as teak (*Tectona grandis*) and neem (*Azadirachta indica*) and at a later stage fast growing eucalypts (*Eucalyptus spp.*), *Pinus*, and *Cupressus spp.* The emergence of a global market for gum arabic led to a major expansion of planting of *Acacia senegal* as a commercial crop, much of whose planting took place in cleared savannah woodlands.

Technical guidelines for sustainable harvesting and management of indigenous forest have been drafted by the MAF and guided by the technical approaches developed by both ITTO and FAO. Guidelines for sustainable management of plantation forests, which have been developed by both FAO and by The Forest Dialogue (TFD), can provide a solid basis for plantation-based forestry in Sudan. Technical approaches to management of agroforestry-based farming systems are being supported through joint technical programs with the World Centre for AgroForestry (ICRAF) based in Nairobi.

(8) Introducing Predictable and Sustainable Long-term Financing Mechanisms

The main issue discussed in this Section is the need to increase annual budgetary resources allocations to the forestry sector.

A major constraint to the putting in place of an effective forest administration has been low budget allocations to the forest sector. Forest revenues are directed to the central Ministry of Finance and are not reallocated to the forest administrations at the national or regional levels. The budget of MAF was reduced from US$ 23 million in 2007 to US$ 15 million in 2008. In drafting the 2009 budget it was recommended that the forestry sector should receive around 25 percent of the MAF budget, a substantial increase compared to 2008. Nevertheless, this proposed increase will still be far from adequate for financing the formidable program of forest conservation and development that will be needed to ensure forest recovery. Significant, appropriate budget allocations will be important for GoSS to be able to attract additional external donors and private sector technical assistance and investment.

Policy Statement No. 23 of the 2007 Forest Policy Framework provides guidance on the need to ensure predictable financing for forest management. As a step towards achievement of that goal, MAF has established a National Forest Development Fund (NFDF) into which 10 percent of all forest fees collected are paid. GoSS is initiating work to further develop this approach and to secure its legal approval by state governments and the National Assembly.
However, there is a dire need to revisit this aspect, and it will be very useful to do a careful stocktaking of all such initiatives and identify the principles that will likely ensure its successful and transparent operation.

**Summary**

xxxii. GoSS is making encouraging progress in analyzing the potential of the forest resources of Southern Sudan to contribute to poverty alleviation, accelerated economic growth, and to protection of forest-related environmental services. However, it is constrained on several fronts, especially in relation to the existing legislative, policy, and administrative framework. There are also organizational, human, financial capacity, and knowledge-base constraints to a revival of the sector and tapping the full potential of the sector for growth and poverty reduction. A couple of donor-financed programs, such as the ongoing partly World Bank-supported Agriculture and Forestry Development Project (SAFDP), have helped to initiate a process of forest sector recovery. However, most of the investment and technical assistance opportunities activities identified in this Policy Note remain significantly underfunded. Thus, there are opportunities for donor agencies, conservation NGOs, private sector companies, and financial institutions to provide both investment and technical assistance support for scaling up of promising ongoing initiatives.
A LEGAL AND INSTITUTIONAL POLICY FRAMEWORK FOR SUSTAINABLE MANAGEMENT OF FOREST RESOURCES IN SOUTHERN SUDAN

A POLICY NOTE

A. Background and Introduction

1. The objectives of this Policy Note are to: (a) contribute to an improved understanding of the currently underutilized potential of Southern Sudan’s forest resources; (b) identify the legislative, institutional, governance, and policy reforms needed to create an enabling environment for both public- and private-sector investment; (c) analyze what has worked and what has not worked in the pre- and post-Comprehensive Peace Agreement (CPA) period; and (d) suggest priority actions and steps towards revitalizing the sector.

A.1 Contextualizing Forestry Sub-regionally and Nationally

2. The main issue is how the proposed reforms in the sector would fit in the sub-regional and national policy environment. What would be the political economy within a geopolitical context? -- The forest sector's contribution to the GDP of Southern Sudan has been estimated at 7 percent. This could increase if Southern Sudan re-engaged in sustainable timber harvesting and was able to export timber, which it is currently not doing because of the suspension on timber harvesting and export. Currently, dependency on oil revenues for development is high, but revenues started to dwindle as global prices for crude oil tumbled. The upcoming referendum over whether Southern Sudan will secede and become a sovereign state or stay in the unity government should not significantly influence the reform process. Thus, the team believes that the proposed reform agenda would be robust enough to survive whatever the referendum outcome would be. There would therefore be some merit in assessing what the forestry institutions in the North are already doing and in exploring options for some collaboration and closer cooperation with them as the reforms in the South progress. In addition, other regions of Sudan, especially those peripheral to Southern Sudan, would continue to depend on Southern Sudan for forest products, including timber, fuelwood, and charcoal. This dependency may continue for a long time. As long as the moratorium on harvesting and export of timber is upheld in Southern Sudan and the local demand for timber products continues to grow, Southern Sudan would import timber and other non-timber forest resources from the neighboring countries, especially DRC and Uganda, reflecting another form of economic integration in this area.

3. The experiences and lessons learned from operations under the tutelage of the Program on Forests (PROFOR) and Forest Law Enforcement and Governance (FLEG) in Africa and Asia would also be worth studying as to how these could be replicated in Southern Sudan and the countries of the sub-region to ensure take-off and acceptance of the reformed forest governance agenda.

4. The report had correctly identified the importance that needs to be attached to land use planning, forest management aspects including oversight and operational functions, and
addressing weaknesses in the regulatory environment. Other key institutional concerns that were deliberated were in relation to how to address the complex issue of defining roles and responsibilities across the decentralized structures (federal, regional, payam, boma, and community levels) of government, and ensuring full inclusion of all actors at these levels. The issues of co-management and collaboration in resource management and how the principles of equity and fairness are applied when distributing benefits were also raised.

5. Key areas discussed and elaborated in this Policy Note include the pros and cons of the proposed forest development fund, the need to develop governance indicators, and the creation of an information and knowledge database on forestry. On the development of a special forest development fund, the consensus was that there is a need to revisit this aspect, and it will be very useful to do a careful stocktaking of all such initiatives and identify the principles that will likely ensure their successful and transparent operation. On the governance indicators, the team was pointed to the initiative called the “Roots for Good Forest Outcomes – An Analytical Framework for Governance Reforms”, and the ongoing work in the Bank on actionable governance indicators.

**A.2 Contribution of Forest Resources to Local Livelihoods**

6. Much of the population of Sudan, both urban and rural, depends on forests. There is a high degree of dependence on fuelwood and charcoal as the main sources of energy. Forests also provide timber for construction and furniture. Forest ecosystems provide a range of benefits, from non-wood products such as honey, gum arabic, and traditional medicines, to serving as areas for grazing, hunting, and fulfilling key ecological functions in the Nile Basin. Many rural livelihoods depend on forests, which provide a vital source of income for the rural poor (see Box 1). Furthermore, the commercial lumber industry is a small but growing source of employment and revenue for the GoSS and the state governments in Southern Sudan.

**Box 1: The Importance of Forest Resources for Local Livelihoods in Southern Sudan**

A USAID-funded survey of selected towns and Internally Displaced Person (IDP) camps across Southern Sudan, undertaken in 2003, quantified the collection and consumption of wood products from forests. Firewood, charcoal, construction poles, craft wood, and farm tool handles were the most common wood products harvested in all locations. The average household was found to consume up to four bundles of firewood and 50 kg of charcoal per week. The results from this study also showed that, as is the case in many other parts of Africa, in Southern Sudan the burden for collecting firewood falls mostly on women and children who daily have to walk great distances due to the depletion of resources closer to established settlements.

*Source: Forestry Working Group 2003.*

7. This Policy Note focuses in particular on issues relating to improvements in forest governance. It reviews strengths and weaknesses of existing institutions and mechanisms for decision-making. The issues discussed include legal, institutional, and policy measures currently
in place or under preparation for forest conservation and management. Special emphasis is given to policies and strategies for decentralization of forest management responsibility and for engagement of local communities and the private sector. The Note also discusses the importance of policy reforms needed to address politically difficult issues such as uncertain land tenure, currently fragmented institutional approaches to sustainable forest management, and protection of forest-related environmental services.

A.3 Impacts of the Civil War

8. Southern Sudan has emerged from over twenty years of civil war. During the years of conflict, forests were especially important as a means of survival for rural people in Southern Sudan, when farming and pastoral activities were disrupted. However, uncontrolled timber harvesting and illicit trade in timber became the order of the day as the public administration in the forestry sector got worse and large numbers of public servants left the sector. As the forestry administration broke down, illegal harvesting of timber flourished, generating the money needed by the SPLM/SPLA to procure arms for the war. However, the volume of timber harvested during the wartime is estimated to be far less compared to the level of exploitation that would have occurred if there had been peace. This was partly because of the poor state of road infrastructure that hampered access to forests and markets outside the forest gate, and also because most milling companies had folded up production and export as a consequence of the war. Further, with the exception of the military that occupied these forests and logged them, civilians avoided the forests because of security reasons. Arguably, however, Southern Sudan might have lost millions of dollars in foregone payments on illicit timber harvesting and trade. According to a World Bank report released in 2003, estimated revenues lost to illegal logging in developing countries are close to US$ 15 billion a year, nearly matching official development assistance (ODA). For example, revenue loss in Ghana as a result of illegal logging has been estimated at US$ 37 million a year. In 2001 Indonesia was losing an estimated US$ 600 million a year in foregone payments on stolen timber – four times the combined local and central government investment in the forest sector. In contrast to Liberia and Congo, there has been no evidence that there were any speculative acquisitions of timber harvesting concessions in Southern Sudan during and immediately after the war.

9. Given the range of their benefits, natural forests, plantations, and agroforestry resources will be instrumental in the reconstruction and socio-economic recovery of Southern Sudan. In that context GoSS is facing major challenges in attempting to: (a) regulate its forest estate, (b) protect and manage its natural forests, savannah woodlands, and plantations, (c) develop the wood industry in an economically and environmentally sustainable manner, (d) maintain and expand the adoption of improved agroforestry farming systems, and (e) achieve protection of forest environmental services. Commercial-scale harvesting and management of plantation forests and establishment of plantation-based forest industries could quickly generate employment and substantial revenues for communities and the national economy.
A.4 Forest Governance: Key Issues

10. This Policy Note reviews the strengths and weaknesses of existing forest governance institutions and systems for decision-making, economic growth, development, and poverty reduction. Forest governance refers to legal, institutional, and policy measures currently in place or under preparation, especially for forestry management but generally also for economic growth. In the case of Southern Sudan, it includes measures related to other sectors such as land tenure, environmental and natural resource management, biodiversity and wildlife conservation, livestock, and decentralization. The sector can still boast of a relatively elaborate superstructure of constitutional rights, comparatively progressive policies on the surface, and comprehensive laws, albeit all these seem to be suffering from inherent weaknesses, especially proper implementation. Post-conflict changes in super- and sub-structures are partially responsible for the specific features of the sector.

11. Southern Sudan forest policies and statements can no longer be seen as the only main influence on forests and forest stakeholders, since other social, political, macro-economic, and market-related policies that influence demand and supply for goods and services may often exert much bigger effects on the way its forests are managed and the kind of benefits stakeholders can derive from the resource. Domestic and international processes and market movements, including the international forestry stage (including the environmental and social justice agenda) continue to dictate what modern forestry should entail in Southern Sudan. The extent to which the country’s forest policies and statements could apply will depend on how other sectoral policies and legal frameworks are brought into harmony with each other. In North Sudan, for instance, pervasive housing policies implemented by the GoNU in recent times have resulted in the large-scale conversion of forest reserve lands in the peri-urban areas of Khartoum into residential estates. Also, massive exploration and extraction of crude oil in the Abyei locality and other peripheral regions to Southern Sudan has resulted in deforestation, pollution, and contamination of soil and water. Thus, policy divergence and disharmony between various sectors can be detrimental to sustainable forest management. History is replete of examples from other African countries.

12. Another key governance issue that GoSS is endeavoring to address relates to dismantling the obsolete institutional constructs that rely on a centralized and rigid organization (command-and-control approach) and ignored traditional rights and customary rule to forest management. Indeed, GoSS has subscribed to amending the forest management system and regime to stop the marginalization and alienation of traditional land owners, and to provide them with sufficient rights and more responsibilities, albeit slowly. GoSS is also keen to reform the forest management rights and to ensure that there would be no expropriation of communities and loss of resource (timber) allocation rights by forest-owning and -dependent communities. Ensuring inclusiveness has been one main challenge that GoSS seems to be dealing with, particularly for the forest reserves, how to also reform the ownership and tenure arrangements, so that forest-owning and/or peripheral communities would be given more rights to receive a share of royalties from forest exploitation and a voice in decision-making processes on how forests should be managed. The new Forest Policy Framework of 2007 advocates an effective and transparent system of forest revenue-sharing commensurate with management and protection responsibilities.
of all actors. However, in practice, no share of revenues accruing from forest management and protection is ceded directly to local communities yet. Yet improving the forest revenue redistribution may be fundamental to getting local administration and communities to view forests as productive assets and commit to their sustainable stewardship and preservation. GoSS should commit to improving and expanding accountability and local governance as a major step towards improving the establishment and implementation of a fair and efficient system of allocating forest revenues.

13. Governance regimes being seriously studied by GoSS include how to improve mechanisms for disclosing and disseminating forest and forestry-related information to the broader public. The strength of disclosure and dissemination is that it helps introduce elements of democracy such as accountability, transparency, and trust-building in the allocation of forest harvesting rights, fairness, and equity in the redistribution of benefits accruing from forest management, as well as empowerment and active participation of key actors in the decision-making processes and actual on-the-ground forest resource management. Another equally important activity pursued by the GoSS since the signing of the CPA involves moving forward steadily on decentralization and devolution of government institutions and forest management responsibilities from the center to the province, payams, bomas, etc. This shift will entail a re-clarification of organizational mandates.

14. Thus, recognizing the range of different forest types and uses in Southern Sudan, and the extent to which the livelihoods and well-being of many people in Southern Sudan depend on forest resources, this Note is intended to provide a set of policy and operational recommendations for sustainable forest management in a post-conflict environment.

A.5 Overview of Forest Resources in Southern Sudan

15. A Forest Policy Framework prepared by the GoSS Ministry of Agriculture and Forestry (MAF) estimates that the natural forests and woodlands of Southern Sudan total 191,667 km\(^2\), or about 29 percent of total land area. Of this, forest reserves comprise 17,460 km\(^2\). Plantations, consisting largely of teak, covered 1,879 km\(^2\) prior to the start of the civil war, but are now estimated to have been extensively degraded during the years of conflict. On the other hand, the USAID Training Needs Assessment, citing a 1999 report of the Forests National Corporation (FNC) in Khartoum, gives estimates of 6,250 km\(^2\) of natural forest and 150 km\(^2\) of plantations.

16. The extreme south and southwest of Sudan represent the sub-tropical vegetation zone, which still changes relatively abruptly from savanna to semi-tropical forest. Large areas of Southern Sudan exhibit low-density woodland savanna vegetation of mixed scrubs and grassland. These are the areas abundant with gum trees. The Ironstone hills bordering the DRC in the southwest support forestry and intensive agriculture. In the extreme south of Southern Sudan are the Imatong, Dongotona, and Acholi mountain ranges that flank the White Nile and contain dense forests. Mount Kinyeti within these ranges peaks at an elevation of 3,187 meters, being the highest point in Sudan.
17. Further west of these ranges are the Jebel Mountains that contain one of the best remaining teak plantations. Over 5 percent of Southern Sudan is covered by permanent wetlands and flood plains, linked to the Nile tributaries that traverse the southern plains, with the largest such wetland, the Sudd, covering 30,000 km² and lying between the towns of Bor and Malakal. This large wetland area comprises multiple channels, lakes, and swamps, which have been less impacted by man and represent a safe haven for wildlife, including migratory birds.

18. There is considerable uncertainty as to the extent and condition of forests in Southern Sudan. Estimates prior to 1983 concluded that around two-thirds of the total national forest biomass found in Sudan at the time was located in Southern Sudan. A more recent assessment by the United Nations Environment Program (UNEP) and the International Center for Research in Agroforestry (ICRAF) in 2007 estimated that Northern, Eastern, and Central Sudan have already lost as much as 70 percent of their forest cover. While more than half of Southern Sudan’s forests remain, deforestation pressures are increasing, driven mainly by demands for agricultural land, fuelwood, and charcoal.
B. Strategies for Effective Conservation and Management of Southern Sudan’s Forest Resources

B.1 Strengthening the Forest Resource Information and Knowledge Base

19. The main issue discussed in this Section is how to strengthen and accelerate the arrangements that the MAF is currently putting in place to assemble more accurate data on the extent and nature of the forest and woodland estate.

20. A basic problem in Southern Sudan’s forestry sector is the lack of reliable data on the extent and nature of the forest and woodland estate. Comprehensive and accurate information on all forest and agroforestry resources is an essential enabling condition for sustainable forest management. This need is already well-recognized, and MAF has received some funding from the Government of Norway for the establishment of a Land Resource Survey and Information Unit (LRSIU). This unit is working to collect, analyze, maintain, and present data covering the resource situation for the agriculture, forestry, and environment sectors, including land use issues, and it includes an operational GIS facility.

21. LRSIU is also working to develop methodologies and systems for forest resource assessments of plantations and natural forests and to implement forest inventories in selected pilot areas in three states with an initial priority focus on plantations. In addition, based on older data that has been gathered, a suitable baseline of information on Federal reserves and State reserves should be developed and made available as soon as possible so that this information can be updated and agreed upon. While LRSIU already receives financial support from the Norwegian Government, strong and sustained support from other donors and coordinating bodies is vital, along with support from GoSS. The updated knowledge base that is planned will embrace the entire range of different forest types, namely – customary, protection, production, and plantation forests as well as agroforestry-based farming systems. In anticipation of the lifting of an ongoing moratorium on concession allocation, existing plantation forests have the potential to make a significant contribution to an economic recovery. Special emphasis is therefore being given in the short-term to assembling of data on the status of such plantation resources. Special attention will be given by the LRSIU to data needed for: (i) an assessment of the capacity of the forest system to provide non-timber forest products, such as bush meat, gum, shea oil and butter, fruits, medicinal plants, and environmental services such as watershed protection, carbon sequestration, and ecotourism; (ii) assessment of the regenerative capacity of forests; (iii) assessment of community livelihood dependencies; and (iv) human and financial capacity, particularly at the community level to manage forests, provide extension services, and train future resource managers and collaborators.

22. Customary forests are those that are being reserved for use by local communities. Customary usage includes collection of wood for fencing and fuel, harvesting of forest products, hunting for household consumption, and other such uses. A key policy issue is how to contain slash and burn agriculture, especially in protected areas.

23. Protection forests are those that have a high biodiversity conservation and research value, and/or which perform vital ecosystem service functions such as watershed protection. The
MAF policy allows for collection by forest-adjacent communities of non-timber forest products (NTFPs). Of growing interest for protection forests, in particular, is the potential for financing under emerging instruments in the field of climate change mitigation.

24. **Production forests** are those natural forests that have been classified as available for harvesting of forest products. To ensure sustainable production forest management, a sound methodology for calculating allowable cut, with scientifically-based means for estimating forest growth must be used. Included in the consideration should be a calculation of the amount to be replaced through natural re-growth before the next planned harvest.

25. **Plantation forests** are intensively managed, commercial, planted forests. The financial returns from plantation forests are attractive to both local communities and smallholders. Globally there is a growing interest by private sector forest companies and financial institutions to invest in plantation-based forestry.

26. **Agroforestry-based farming systems** are widely practiced throughout Southern Sudan. The incorporation of nitrogen fixing tree species, windbreaks, and farm boundary tree planting all have well-quantified potential to contribute to increased agricultural crop yields and to rural income generation.

27. Crucial first steps towards comprehensive forest management planning are updated forest inventories and delineation of the national forest reserves to be managed by GoSS MAF, and the State forests to be managed by the States. Access by local communities to specific forests in each location would naturally be addressed as part of the process.

28. MAF’s assessments of the sector go beyond taking stock of merchantable timber species and the condition of the forests. They include proposals for: (i) an assessment of the capacity of the forest system to provide non-timber forest products, such as bush meat, gum, shea butter, fruits, medicinal plants, and services, such as water, carbon, and ecotourism; (ii) an assessment of the regenerative capacity of the forest; (iii) an assessment of community livelihood dependencies; and (iv) an assessment of human and financial capacity, particularly at the community level to manage forests, to provide extension services, and to train future resource managers and collaborators. While the private sector waits for the lifting of the moratorium on extraction and exports of logs, the government is seeking to mobilize donor resources to complete the demarcation of forest boundaries and updating of forest maps through a participatory approach.

29. Remote sensing technologies such as satellite imagery and aerial photography that increase the speed at which forest mapping and monitoring can be done, while also analyzing and synthesizing vast amounts of spatial and temporal data that exist, are not yet widely used in Southern Sudan. Geographic information systems (GIS) and global navigation satellite systems and new technologies (airborne light detection and ranging from the use of lasers or space-borne radar and radio detection and ranging, etc.) would provide Sudanese foresters and managers with increasingly precise information on the nature and condition of forest resources (e.g. variable height, structure, density, and composition of forests; estimates of tree cover and
height, shape of individual trees, estimates of stand volume and biomass) which can be processed and transmitted rapidly.

30. This information is also valuable for assessing forest attributes and also as evidence for public consultations, verification of legality, and third-party certification. In addition, continuous monitoring and regular updating of the resource data will be a long-term need once the initial infrastructure and capacity have been established. This will ensure the availability of forest information as a key pillar of a comprehensive forest management planning system in the longer term.

B.2 Developing a Coherent Legislative and Policy Framework, Organizational Structure, and Capacity for the Sector

31. The main issues addressed in this section are: (i) how to reconcile conflicting interpretations of the numerous forest statues and forest law policies that have been introduced during the last 25 years; (ii) how to shift the emphasis from the former, highly centralized approach of forest conservation and management to one that fully engages local communities and smallholders; and (iii) how to create an enabling environment for engaging the private sector. With regard to the kind of organizational structures that would be needed, issues addressed in this section include: (i) how to clarify the respective roles of the many different government, community-based, and private-sector agencies that have assumed responsibility for various elements of the GoSS forest conservation and development strategy; and (ii) how most effectively to support ongoing efforts of GoSS and the MAF to achieve more effective integration between their activities. Years of civil war have dealt a severe blow to professionalism, negatively affecting public administration capacity (including procurement and financial management capacities) of Southern Sudan to manage its economy including the forestry sector. Also, in this section, the Note addresses: (i) how to quickly remove constraints to developing capacity and enhancing collective competencies at all levels; and (ii) how to rebuild the capacity of Southern Sudan’s leading training and research centers and to reorient curricula and research efforts to support the significant community and private sector-based programs for which approaches are currently in the planning stage.

32. Forest legislative regimes introduced by the earlier colonial administration in Sudan relied on a highly centralized and rigid organizational approach that largely ignored traditional rights. Colonial administrations (and later also the GoSS) enacted a plethora of statutes (e.g. in 1908, 1917, 1932, 1981, 1986, 1989, 2002, 2003, 2004, 2006, 2007, 2009) that allocated responsibility for custody of the country’s forest resources to the Government’s Forestry Department. These command-and-control approaches relied on a combination of territorial protection and forest fines. They created much tension between Forest Department officials and local communities. Although on paper communities were entitled to receive a share of royalties from forest exploitation, in practice such transfers were minimal.

33. Failure of such highly centralized approaches to improve forest conservation and management have been documented in many other countries (see, for example, Weber, 1995) writing about “fortress forestry”-based approaches to forest management in Madagascar, and concluding that a combination of a high degree of reliance on centralized control and inadequate
strategies for enforcing regulations ended up ‘killing’ control. Similar experiences have been documented in many other countries, including, for example, in Cameroon, Ghana, DRC, and Uganda. Recognition of the limitations of over-centralized approaches in Sudan triggered an analysis of the possibilities for a major shift towards decentralized control and adoption of community-based management approaches to forest resource management.

34. The current legal framework for forest management comprises sections of the Comprehensive Peace Agreement (CPA), the interim National Constitution, the interim Constitution of Southern Sudan, a number of different statutory laws at both the national level and at the Southern Sudan level, ministerial decrees and orders, as well as customary laws (see Annex 1 for details).

35. Given this complex legal framework and the history of conflict, it is not surprising that there are varying interpretations of the laws relating to forests management. For example, MAF officials, with whom this issue was discussed, stated that, despite the fact that it had been officially repealed, a 1989 National Forest Act (which sets out the levels of chargeable revenues for the use of forest resources) is still being applied. Conversely, the Ministry of Legal Affairs and Constitutional Development contended that there is no need to apply the 1989 Forest Act, because two more recent laws have superseded that Act. These are the 2003 Timber Utilization and Management Act, and the 2004 Forest Commission Act, both of which were signed by the SPLM Chairman and entered into force before the CPA.

36. The most recently approved Forest Policy Framework of 2007 (see Annex 1) states that the national Forest Policy of 1986 and the national Forest Act of 1989 “are still applicable to date” especially as regards the gazettement of forests and reservations. This lack of clarity is certainly not limited to the forestry sector, but its negative effects are probably more pronounced because of the shared competency over forestry between GoSS and the states. Figure 1 attempts to capture the complexity of the current status of the legal and policy framework for forests.

37. Clarification and simplification of the different interpretations of the various laws summarized above and of the interrelationships illustrated in Figure 1 would be highly desirable.

38. To summarize, the path towards more sustainable forest management requires putting in place the enabling and appropriate policy and legal environment for reforms in land administration as a precondition for improving tenure security and ownership/property rights, land-use planning, and forest resource management. At the same time one must strive for equity and full civic participation in decision-making and actual management of the resources.
39. Setting and enforcing the legal and policy framework are essential enabling conditions for sustainable forest management and will need to be transparently developed with due consideration of community needs and communities’ genuine participation in forest and woodland resource management. An important interim step has already been taken with the introduction of the new Forest Policy Framework and new Land Act of 2009. Once the land policy is ready, it may be necessary to revise the 2009 Land Act or to draft new regulations, reflecting provisions in the land policy that are not already reflected in the law.

40. One of the important prerequisites for the sustainable management of forest and woodland resources is to establish appropriate and reliable forms of land tenure and institutional relationships that go beyond just a redistribution of access rights but also represent a more fundamental socio-political shift in state-people relations. This issue is already well-recognized in the 2007 Forest Policy Framework. It is a politically sensitive issue, given the widespread belief that “land belongs to the people” (which is, in fact, not explicitly stated in the existing legal framework). To this end, the land policy, which is currently under preparation, and the forest law yet to be developed, will be paying careful attention to the implications for redistribution of access and user rights to forest resources but also to the level of secured authority which communities have over the management of these resources.
Southern Sudan’s currently operating decentralized governance structure has three tiers: GoSS (central administration), states, and local government (see Figure 3). The GoSS mandate is to design the region’s overall development strategy, set enabling policies and oversee their implementation, and allocate resources to the states. States are expected to implement GoSS policies - they can adjust GoSS policies to the state context or formulate and pass state-specific policies within the legal framework designed by GoSS - and support the establishment of local governments for which they will provide technical support and financing. Local governments are responsible for service delivery to the population.

Figure 3: Structure of Local Government in Southern Sudan

42. Based on the new Forest Policy Framework Statements (see Annex 2) and proposed activities of the main forest sector-related organizations (summarized in Annex 3), an underlying objective of ongoing institutional reforms is to create incentives for decentralization of responsibility for forest management. To achieve effective decentralization will be a challenge. It will require realignment of institutional responsibilities in the public sector for forestry, agriculture, and environment, and also getting the public-sector organizations refocusing on public service functions (for instance, public good-type activities, such as environmental and ecological protection functions), while relinquishing productive and commercial functions to other players. Under active discussion are clarification of the respective responsibilities of the MAF, the Ministry of Housing, Physical Planning and Environment (MHPP&E), the Forest National Corporation (FNC), the Ministry of Wildlife Conservation and Tourism (MWCT), Ministry of Animal Resources and Fisheries (MARF), and a proposed semi-autonomous, self-supporting, and income-generating Southern Sudan Forest Corporation (SSFC). The role of the Kagelu Forestry Training Centre (KFTC) is also being discussed. Besides, there is an urgent need for an improved civil service incentive framework and the need for a clearly defined plan for rehabilitation of existing and planned forest-related infrastructure.
43. Local communities and decentralized levels of government have, de facto, a high degree of functional autonomy. At the same time, there is strong commitment on the part of GoSS to rely on traditional authorities to ensure law and order at the grassroots level, mobilize communities, and prioritize service needs. GoSS could benefit from further study of decentralization and community-based experiences and lessons learned in, for example, Tanzania and Zimbabwe (see Annex 6 for details).

44. Box 2 below summarizes external and internal factors that are likely to come into play to ensure successful decentralization in the forestry sector.

**Box 2: Strategies for Successful/Decentralized Forest Governance**

<table>
<thead>
<tr>
<th>External to the forest sector</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Significant transfer of power and responsibilities as well as resources to democratically elected and accountable lower levels of government</td>
</tr>
<tr>
<td>• Fair and clear enforced property rights and an appropriate regulatory framework</td>
</tr>
<tr>
<td>• Respect of the law by governments, the private sector, and civil society</td>
</tr>
<tr>
<td>• Effective linkages between government, the private sector, and civil society institutions</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Internal to the forest sector</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Effective and balanced distribution of responsibilities and authority among different levels of government</td>
</tr>
<tr>
<td>• Adequate resources and institutional effectiveness at each level of government</td>
</tr>
<tr>
<td>• Sufficient participation of civil society and the private sector at all levels.</td>
</tr>
</tbody>
</table>

*Source: Contreras-Hermosilla, Gregersen and White, 2008.*

45. GoSS recognizes that all the institutional and organizational reforms would go to naught if they were not accompanied by well-structured institutional development programs responsive to the needs of the economy, including the forestry sector, and focusing on rebuilding capacities, rejuvanating the human resources, and recreating collective competencies at all levels. In Southern Sudan, the need for capacity building in all sectors, including the forestry sector, is critically important and should go beyond just simply providing knowledge, information, and skills to include a process of removing constraints to the development of capacity. Effective forest administration will depend on the fund of collective competencies that reside with all the sector players.

46. Formal forestry education in Southern Sudan, like in most African countries, is going through hard times because the national government invested too little in it, and donors have practically stayed away from financing academic training in forestry. The overall current FD staffing level of around 500 staff may not be sufficient to develop an administration that could efficiently oversee Southern Sudan’s forest resources. The poor manpower situation in Southern Sudan is partially attributed to the war and budget problems that have led to either the closure of many forestry training institutions or the high turnover experienced in the sector. Students who manage to complete their graduate or certificate courses are poorly equipped with forestry knowledge, information, and skills, badly remunerated and unmotivated, such that they look for greener pastures elsewhere. Academic and research institutions, such as the University of Juba and the Forest Training Centre at Kagelu (FTCK), are a mere shell of what they may once have been. It will require a massive effort (political, human, material, and financial) to restore
competencies of academic and research institutions such as the University of Juba and the KFTC at Kagelu to their former levels in forestry. To this end, there is a tremendous amount of training and research that needs to be done to raise competencies of the young forest graduates and that of the older foresters through retraining in professional courses, institutional attachments, exchanges, and “look-and-learn” study visits.

47. Specific recommendations for capacity building include the provision of new and rehabilitation of infrastructure and strengthening of key elements of the training curricula for both the University and the KFTC. An essential part of the rebuilding will include the provision of infrastructure (lecture rooms, lecturers’ and students’ accommodation, laboratories, libraries, herbarium, etc.), vehicles, equipment and teaching aids, furniture, and reference material. Also, equally important will be to reconstruct management systems for personnel, assets, inventory, material flows, and financial resource management. It is also suggested that special reference be given to spelling out the current status of knowledge on emerging issues such as climate change, market-based instruments (e.g. payment for environmental services), concession management, and eco-labeling). Critical research areas already being promoted and supported by the Ministry of Agriculture and Forestry with donor assistance include: (i) institutional and governance frameworks and land use planning; (ii) stakeholder analysis and capacity assessment; (iii) participatory forest management; (iv) designing appropriate forest inventory methodology; (v) forest fiscal policy; and (vi) technical forestry issues. There is also a need to establish a functional forest extension service that in the short- to medium-term could be driven by government and assisted through NGOs till such time that sufficient private sector capacity is built and is capable of partnering or taking over completely this role. This is a gap that possibly needs to be bridged in the short term if the community development approaches articulated in the 2007 Forest Policy are to succeed.

48. As poor governance is recognized to be a major impediment to achieving development outcomes in the forestry sector, and as the GoSS has initiated work towards streamlining and internalizing governance principles in this sector, this Policy Note takes a positive approach by encouraging GoSS to develop governance indicators that could be used to measure the baseline situation and to monitor progress as various reforms are undertaken. The Note would like to refer GoSS to a framework that has been developed by the World Bank and allows for measurement and compilation of a baseline situation against which decision makers can formulate targeted and actionable interventions to improve forest governance and to make informed choices regarding reform priorities. This framework, called “Roots for Good Forest Outcomes – An Analytical Framework for Governance Reforms”, unpacks forest governance into a number of key building blocks and attributes such that they can be measured through stakeholder surveys. The key elements are: (i) transparency, accountability, and public participation; (ii) stability of forest institutions and conflict management; (iii) quality of forest administration; (iv) coherence of forest legislation and rule of law; and (v) economic efficiency, equity, and incentives.

B.3 Promoting Participatory Forest and Woodland Management
49. The two key questions raised in this Section are: (i) how to create an enabling and legislative framework for engaging local governments and communities in forest conservation and management; and (ii) what can Southern Sudan learn from the experiences of other Africa region countries that have already been testing community-based approaches to management of government-owned and -controlled forest resources.

50. Policy Statement No. 6 of the 2007 Forest Policy Framework of Southern Sudan acknowledges the pivotal importance of community participation to ensure sustainable forest management, resulting also in an increased stream of benefits. A decentralized forest management institutional structure that fully includes communities and their traditional structures in Southern Sudan would help preserve natural forests and woodlands, develop new forests, and maximize the benefits for local communities.

51. Interests of communities and their traditional authorities in forest and woodland management will need to go beyond user interest to include custodial and guardianship interest, which throughout Sudan derive from history, locality, and socio-environmental interest, rather than product use only. As a minimum requirement, communities can be made primarily responsible for the management of their own customary-held forests and woodlands. Given that about 90 percent of forests in Southern Sudan lie outside gazetted forests, involving traditional authorities and their communities in the management (including custodianship and guardianship) of these forests is the most promising option for ensuring that non-forest reserve lands are not further degraded and deforested. Also, institutional re-orientation in Southern Sudan should make public participation and consultation a cornerstone of the governance reforms by ensuring that the public is actively and fully engaged in framing, implementing, and monitoring forest policies and laws, governance regimes, and management plans and decisions.

52. Given the lack of experience in community participation in forest and woodland management, it would be advisable to proceed with carefully monitored approaches as collaborative forest management is being introduced (preferably targeting whole forest-adjacent communities rather than just ‘users’ or user groups who may have less interest in maintaining forest resources).

53. The intention would be to move gradually towards more advanced stages, such as a ‘community-as-manager’- or ‘community-as-custodian’-type institutional framework. However, this shift in emphasis would require a fundamental reorientation in the institutional structure and role of forestry institutions in Southern Sudan including the MAF Forestry Directorate (FD) as well as foresters at the state, payam, and boma levels. The implication is the desirability of a shift away from conventional licensing, regulation, and policing mandates toward an increased focus on the delivery of advisory services to facilitate community-based management. The establishment and cementing of these institutional constructs is an issue of some urgency, especially in view of the existing budget and manpower constraints that currently prevent the development of a large forestry extension service. Annex 5 sets out suggested criteria for developing successful partnerships with local institutions and communities.

54. A number of lessons about successful Community-Based Forest Management (CBFM) can be learned from experiences of many Asian and African countries where decentralization
and participatory management in the forestry sector have already come a long way. To illustrate, Annex 6 summarizes CBFM experiences and lessons learned of relevance to Southern Sudan from Tanzania and Zimbabwe.

**B.4 Enabling Forest-Based Industries to Thrive**

55. The main issues discussed in this Section are: (i) the current status of the many hundreds of small and medium-sized chain saw and sawmilling enterprises that were illegally established during the Civil War; (ii) the role the government plays in the ownership and operation of forest based industries; (iii) the progress being made towards the establishment of larger scale sawmilling/wood based panel plants that have been allocated concession rights to manage specific areas of government-owned forests, and (iv) MAF strategies for improved revenue capture.

56. World War II led to a surge in demand for processed forest products including, among others, timber, furniture, shingles, rubber, gum, honey, and bees wax. This increasing demand for forest products triggered the emergence of a small number of foreign timber merchants and a plethora of local state-owned companies with low harvesting and conversion efficiencies, thus resulting in resource overharvesting.

57. During the Sudan civil war, timber harvesting was rampant in the forests of Southern Sudan and timber cutting did not include reference to any management or harvesting prescriptions and therefore no after-harvest treatments were carried out. Timber sales generated the money needed by the SPLM/SPLA to procure arms, and no accountabilities were demanded. Although today illegal harvesting operations appear to be ongoing in Southern Sudan, these are purported to be carried out by ex-combatants and returnees who have no employment or access to land for agricultural production. Before the war, the timber industry (both logging and milling) in Southern Sudan was predominantly state-owned, but these had collapsed by the time the war came to an end.

58. Today, only a few of the small-sized operations established during the civil war remain. As is the case in many other African countries, small- and medium-sized village-level sawmilling, furniture and joinery manufacturing enterprises (SMEs) have the potential to make a very significant contribution to rural employment and income generation. Encouraging progress is being made in several other African countries such as Mozambique and Uganda with respect to the development of strategies to guide the provision of technical assistance for the upgrading of technical quality of processed products as well as for the exploration of new market opportunities. The technical assistance (TA) will also guide the upgrading of business management efficiency and attracting commercial investments. There is much potential to introduce similar initiatives in Southern Sudan. GoSS maintains a small number of mobile sawmills that it operates in a few places. It has not yet expressed public commitment to privatization of these industries.

59. Currently, only two long-term timber concessions have been granted to larger scale integrated sawmilling/wood-based panel/forest plantation management companies. The companies are the Equatoria Teak Company (formerly in affiliation with the Commonwealth
Development Corporation) and the Central Equatoria Teak Company, and the concessions are for extraction of teak in Loka, Korobe, and Kajiko North Teak Plantations. Both of these industries have committed to financing the management and expansion of degraded teak plantation forests.

60. Once the moratorium on logging is lifted, there should be potential to attract other large-scale investors, subject to their willingness to accept independent certification and monitoring. In line with the government’s announcement that it has decided to place a moratorium on concession allocations, it may be prudent to uphold and enforce the suspension of new wholesale allocation contracts until new transparent concession regulations and guidelines as well as concession agreement documents have been prepared, debated, and published, in accordance with Southern Sudan’s disclosure laws.

61. As Southern Sudan rehabilitates and reconstructs its economy and physical infrastructure, local demand for timber products is increasing and outstripping supply, and the situation is exacerbated by the ban on timber exploitation. This demand is partially met by importing substantial volumes of processed timber products from neighboring countries such as Kenya, Uganda, and the Democratic Republic of Congo (DRC). Unmet demand is also partially fulfilled from thinnings produced by the public forest administration during routine forest management operations. However, a sizable proportion of local demand is met through supplies emanating from illegal exploitation of older teak and eucalyptus plantations in Southern Sudan forest estates, and to a lesser extent from the natural forests. Since most domestic supplies have been from illegal sources, GoSS, state governments, and communities do not reap any benefits from these harvests.

62. The MAF Forestry Directorate has proposed two options for consideration by GoSS to ease the demand-supply discrepancy that is fueling illegal operations. First, as a transitional option, GoSS could institute an interim permitting system with associated harvesting measures that could include, for instance, establishing a minimum girth diameter, pre-marking and post-inspecting trees by forest officers, specifying which species to be felled, requesting placement of bond by a permit holder, defining the number of years after which a coupe could be revisited, setting quotas, deploying log conveyance certificates, etc. A second option could involve lifting the moratorium partially so that GoSS- and state-held plantation forests could be allocated to concessionists whose operations would be guided by well-conceived harvesting measures, while one waits to establish transparent market-based instruments and a regulatory framework for allocating timber harvesting contracts.

63. GoSS is taking progressive steps toward achieving sustainable forest management by undertaking forest inventory data collection and by preparing forest management plans for each type of forest that prescribe harvesting, conservation, and silvicultural regimes that include provisions on social responsibility contracting mechanisms and outcome-based environmental imperatives.

64. At the same time as the government is embarking on developing clearly defined and transparent procedures for licensing and permitting concession allocations (preferably through an open bidding process or public auctioning governed by clear rules and procedures), it will be
undertaking reviews of forest fees and price setting system, forest revenues collection and redistribution (including equitable revenue sharing and distribution arrangements) at the GoSS and state levels, reflecting the different levels of ownership and involvement.

65. The forest revenue system in place prior to the onset of the war had broken down completely by the time the civil war ended, and attempts to reintroduce a workable system through the promulgation of the 2004 Timber Utilization Act and the 2004 Forestry Commission Act failed. This was because of: (a) the low capacity that existed in the immediate post-war period; (b) poor accounting and failure by revenue collection staff to remit whatever little was collected to the GoSS treasury; (c) confusion about who actually has responsibility for revenue collection (including lack of coordination among the collection entities); (d) the unrealistically low price, fee and charge levels published in a Ministerial Order of 2006 that failed to consider cost elements related to management, production/protection, transportation, product processing, etc., in fixing prices for various forest goods and services (the main constraint had been the paucity of pricing data and information); and (e) the lack of clarity on how revenues were to be shared among actors. The current basis for revenue collection from forest-based industries is far from satisfactory.

66. This Policy Note outlines opportunities to raise forest revenues through taxes and charges that apply to permits and concessions. These may include: (i) the annual area fee which corresponds to the right of access to the resource; (ii) the felling tax, a self-declared tax assessed on the quantity of timber harvested; (iii) the mill-entry tax, based on the timber volume entering the sawmill (before processing); and (iv) the log export surtax. Other charges that may apply to forest users include those charges to be paid for the implementation of forest inventory and management plans, and other charges, such as fees for the transfer of concession rights. The revenue from the annual area fee may be shared, by specified percentage to be agreed upon, among GoSS, state/local authorities, and communities established in the logged area. On the other hand, all products from customary (community) forests could belong to the relevant communities according to the management agreements. GoSS could direct that no tax would be collected from customary forests; however, taxes could be collected by forestry staff on forest products traded at key assembly markets.

67. The new 2007 Forest Policy Framework advocates introduction of an effective and transparent system of forest revenue sharing commensurate with management/protection responsibilities by GoSS, State Governments and local communities. It re-emphasizes the validity of a 2006 Ministerial Order issued by the GoSS Minister for Agriculture and Forestry and provides guidance and a formula for forest revenue distribution. While it attempted to address most of the setbacks, the Ministerial Order does not cede any share of the revenues to local communities directly.

68. Table 2 below shows how revenues accruing from the various types of forests and woodlands (Central Forests Reserves “CFRs”, Provincial Forest Reserves, “PFRs”, Council & Community forests, and other natural forests & woodlands) are distributed among five different entities, four of which are legally recognized institutions. In CFRs and PFRs, the GoSS retains 70 percent and 30 percent, respectively; State Governments’ shares are 20 percent and 60 percent respectively. The not-yet-legitimated National Forest Development Fund receives 10
percent of the revenue in each case. It is not clear who holds the authority to disburse money that goes into the NFDF.

**Table 2: Current arrangements for forest revenue sharing in Southern Sudan**

<table>
<thead>
<tr>
<th>Source/Ownership</th>
<th>Proportional Distribution (in percent)</th>
</tr>
</thead>
<tbody>
<tr>
<td>GoSS</td>
<td>State Government</td>
</tr>
<tr>
<td>CFR</td>
<td>70</td>
</tr>
<tr>
<td>PFR</td>
<td>30</td>
</tr>
<tr>
<td>County Council &amp; Community Forests</td>
<td>20</td>
</tr>
<tr>
<td>Other natural forests &amp; woodlands</td>
<td>40</td>
</tr>
<tr>
<td>County Councils</td>
<td>20</td>
</tr>
<tr>
<td>Communities</td>
<td>70</td>
</tr>
<tr>
<td>NFDF</td>
<td>10</td>
</tr>
<tr>
<td>Communities</td>
<td>10</td>
</tr>
</tbody>
</table>

It is not clear who holds the authority to disburse money that goes into the NFDF.

69. Comprehensive reforms in forest taxation have the potential to assure more sustainable forest management. In the past, taxes were levied on exported logs and processed timber (i.e. volume-based). However, that approach contributed to wasteful resource extraction. The MAF’s intention is to devise a taxation system that will promote sustainable forest management, increase local processing, and facilitate tax collection, sharing of forest rents, and improved governance and transparency in the forest sector. Those approaches would address the problem that current arrangements for revenue sharing run counter to the commitment made in the 2007 Forest Policy Framework to shift the responsibility for forest management to local communities and to ensure that they become major beneficiaries of forest harvesting derived revenues.

**B.5 Creating an Enabling Environment for Attracting Private Sector Investment**

70. Key questions addressed in this section are: (i) how to introduce transparent long-term concession allocation policies that will provide incentives to private sector investment; (ii) how to maximize the possibilities for developing mutually beneficial partnerships between large private sector companies, local communities, and smallholders; and (iii) how to increase support for small-medium scale forest-based processing industries.

71. A key policy issue that will strongly influence the willingness of private sector investors to engage in harvesting and sustainable management of forest resources will be the arrangements that are under discussion for allocation of long-term forest concession rights. During the liberation struggle eleven so-called “provisional contract approvals” were awarded to timber extraction companies under the SPLM/SPLA Secretariat of Agriculture to support SPLM war efforts. However, these were cancelled after the signing of the CPA in 2005 through the Provisional Order No.001/MAF.11/2005 issued by the Minister for Agriculture and Forestry of the GoSS, and only limited concessions have since been approved on ‘special needs basis.’

72. Without being explicit, the 2007 Forest Policy Framework (Policy Statement Numbers 1, 8) directs the development and use of market-based instruments for tendering and auctioning of forest concessions, and to this effect, GoSS MAF has advanced fast in the development of a framework and guidelines for evaluating and awarding timber concessions (utilization contracts) to small-, medium-, and large-scale industries. The draft concession framework gives focus on...
local community involvement in contract award, environmental and social considerations, and, above all, opportunities to all stakeholders interested in the exploitation of forest goods. A draft of the framework would soon be presented to the Minister with responsibility for forestry in Southern Sudan. The concession management system would be applicable to all types of forests. Until such time that a concession management system is in place, it seems probable that the current moratorium on logging and export of round logs will be maintained.

73. For now there seems to be no coherent policy to help small-scale loggers and other wood-based industry players, particularly those in the informal sector, to obtain timber from legal sources. Thus, the informal sector remains essentially illegal, and experience from other African countries has shown that in cases like this many small-scale enterprises may simply avoid the bureaucratic delays, red tape and corruption involved in legitimizing harvesting and processing operations.

74. Forest reforms need to provide opportunities for changes in industry structure and mix of products produced. Future concession and processing reforms should encourage creation of large-size concessions as a way of reducing the fixed costs of forest management and restrictions of market flexibilities. In Cameroon, companies offset these inherent risks associated with small-size concessions by acquiring many contract areas and partnering or acquiring other companies, and integrating logging with processing facilities. These opportunities helped create the economies of scale that the industry needed to keep fixed forest management costs down and break marketing inflexibilities. The trend towards concentration and integration may likely enhance sustainable harvesting, set new social, fiscal, and environmental standards, and increase recovery rates (i.e. economic efficiency) as more downstream processing may be undertaken. However, GoSS policies in regulating the forest industry sector should encourage rather than undermine competition or favor oligopolistic practices. They should not discourage or restrict the emergence of new, smaller companies in the formal and informal sectors. New GoSS policies should seek to promote at the minimum product and market diversification and also allow companies to diversify the source of capital and ownership structures. But GoSS policies should also not lead to overexpansion of industry-installed harvesting and processing capacity, since this can contribute to illegal activities in and outside the forest. Lessons can be taken from Ghana, where installed capacity has been found to be three-and-half times the sustainable annual allowable cut (AAC) of one million cubic meters. In the absence of an efficient monitoring system in Ghana surplus capacity appears to have been met to a large extent with timber illegally sourced from reserve forests. Data established during 2005 in Cameroon found installed capacity to be 300,000 cubic meters in excess of the AAC (2 million cubic meters) of major timber species.

75. Conservation concessions are not common in Southern Sudan. While the GoSS and states have set aside areas for conservation and refrain from permitting harvesting, no strides have been made so far in Southern Sudan to mobilize investors or partners into conservation concession agreements. Southern Sudan has no framework (verifiable norms, guidelines, standards, etc.) for concluding conservation concession agreements. For now, most critical forest habitats are expected to be protected somewhat because there is currently a ban on harvesting of timber in natural forests. However, despite the harvesting ban, there seems to be protected forest habitat transformation since the governments are unable to protect these areas. They are unmanaged and
exposed to illegal exploitation of timber and game, as well as encroachment through the traditional slash-and-burn agriculture. GoSS has deployed a limited number of forest guards to protect forest reserves, but they have limited resources, with few vehicles or fuel for effective patrolling. There are also problems in the rural areas due to the presence of demobilized soldiers, and the FD is therefore unable to provide effective protection of the areas under its responsibility.

76. Generally, the corporate sector in Southern Sudan has not yet played a major role in forest management in the past and present. If at all, this had been limited to logging and wood processing, and with the long civil war its engagement became weakened. It has not played any prominent role in broad policy formulation and forestry processes either; it has not influenced science and academia and neither has the corporate sector influenced general public perception about forestry. It has never played any significant role in forest management, including plantation development or management (silviculture and protection) of the natural forest. Southern Sudan lacks the experience that countries like Cameroon, Ghana, Gabon, and Côte d’Ivoire have in private sector engagement in forestry. One option for the future that has been well tested in other countries, such as South Africa and Ghana, is the possibility to develop partnerships between larger timber companies that have long-term concession rights and local communities and smallholders (see Annex 7 for details).

77. There are also examples worth emulating from northern Sudan where fruitful partnerships were developed in the 1970s, for example between the Forest National Corporation (FNC) and the Gum Arabic Company (GUMCO). This partnership targeted rehabilitation and restocking of the gum belt, and about 15,000 farmers in hundreds of villages were involved in planting *Acacia senegal* in their own farm holdings. Other successful joint ventures by the FNC and private sector include one concluded between FNC and the Haggar Tobacco Company for conservation of biomass energy through the use of bagasse/molasses briquettes, and agreement between the Industrial Research Centre on wood forest products and the Nile Petroleum Company relating to the use of LPG in domestic and industrial sectors. Recent experiences include partnerships with sugar schemes such as Kenana, Assalaya, W. Sennar, Guneid, and N. Halfa that have established irrigated plantations, and a Saudi Company, Gandil, which is active in tree planting for gum production.

78. The corporate sector in Southern Sudan has not operated in a competitive environment where it faced challenges and opportunities such as taking advantage of the rapid growth in demand from wood-importing countries, climate change and carbon sequestration, and adherence to tenets of corporate social responsibility and ‘green’ values with mounting pressures to abide by environmental and social regulations and safeguards. Another challenge in Southern Sudan will be how the private sector can adapt to shifting consumer preferences to certified eco-social-labeled products, once the temporary suspension of timber harvesting is lifted. Also, the question arises as to how well the private sector can respond by taking a more prominent role in forest management, including timber production, and increasingly also in other forest goods and services including biodiversity, watershed, and recreational management if indeed the government, and for that matter the FD, adopted more liberal market policies and also restructured its own roles.
79. As an important step towards attracting responsible private sector investment, GoSS and the MAF have been developing a strategy that would ensure long-term concession rights linked to voluntary adoption by forest industrial companies of sustainable harvesting measures and independent certification schemes. MAF is in the process of developing transparent market-based instruments and a regulatory framework for allocating timber harvesting contracts.

80. MAF has been exploring possibilities for the involvement of a third-party observer whose mandate should be to ensure fairness and transparency of controls and penalties, facilitate public information and the involvement of civil society and include court case-tracking. Within the medium- to long-term, certification and eco-labeling systems, such as the EU-supported Voluntary Partnership Agreement (VPA) already adopted in Ghana, could be tested in Sudan. The MAF’s role would be one of encouraging certification by providing the right incentives for adoption of transparent certification processes.

**B.6 Protecting and Enhancing Forest-Related Environmental Services**

81. Apart from the goods that the forests of Southern Sudan provide, they also provide ecological and environmental services, including biodiversity conservation (maintenance of ecosystem functioning, option and existence values) and carbon sequestration and storage. Other key services include watershed protection (for example, erosion and sedimentation control, reduced risk of flooding downstream, maintaining delicately-balanced aquatic ecosystems, maintenance of soil fertility, controlling soil salinization and regulation of water flows, and maintenance of water quality), and landscape beauty. Many of these environmental services fall under the category of positive externalities (these could be uncompensated benefits) or public goods.

82. Forest biodiversity is important for a range of features, from its role in maintaining a stock of information for potential future use to its existence value. The demand for forest biodiversity is broad-based, and benefits can be spread globally, internationally, and nationally as well as locally. The primary cause of forest biodiversity loss in Southern Sudan is habitat loss through deforestation, degradation, and overexploitation.

83. Deforestation (through logging, land clearance, and burning forests) and degradation (through soil erosion) are the second leading cause of global warming, accounting for approximately 18 percent of global greenhouse gas (GHG) emissions and over a third of emissions from developing countries. Thus, while forests can be a source of GHG emissions, forests can also be a store of carbon (forests account for two-thirds of terrestrial carbon). Southern Sudan’s forests can play a vital role in generation carbon offsets in forests trees and other vegetation (and even in soils) through four main approaches: (i) improved forest management (i.e. reduced impact logging); (ii) conservation and protection against deforestation; (iii) reforestation/afforestation, including agroforestry; and (iv) introducing biomass substitutes for fossil fuels.

84. The Bali Action Plan calls for consideration of policy approaches and positive incentives on issues relating to reducing emissions from deforestation and forest degradation in developing countries, and the role of conservation, sustainable management of forests and enhancement of
forest carbon stocks in developing countries. The Conference of Parties meeting in Copenhagen in 2009 has considered ensuring long-term incentives to facilitate forest-related climate change mitigation in developing countries.

85. An important objective of the Strategic Climate Fund (SCF) is to maximize co-benefits of sustainable development, particularly in relation to the conservation of biodiversity, natural resources, ecosystem services, and ecological processes. At COP 15 in Copenhagen, the World Bank announced the establishment of a Forest Investment Program (FIP) under the SCF to catalyze policies and measures and mobilize significantly increased funds to facilitate the reduction of deforestation and of forest degradation and promote improved sustainable management of forests, leading to emissions reductions and the protection of forest carbon stocks. Southern Sudan could greatly benefit from ongoing multilateral and bilateral efforts to reduce emissions from deforestation and forest degradation (REDD).

86. Although Southern Sudan’s forests may not offer a panacea for the maintenance or loss of watershed services, their contribution to offsetting watershed deterioration may be significant, and the services they provide may vary between forest sites. Improved forest management, land management, reforestation, and forest protection are prominent activities to guarantee the integrity of watersheds, including maintenance of water table levels through infiltration and soil retention.

87. Southern Sudan’s forests contain wildlife that represents powerful magnets that could draw tourists from around the world. Southern Sudan’s landscape beauty includes the sudds, the riparian forests of the major drainage systems such as the Nile, and the montane forests of the highlands. Scenic beauty from these systems have historically been provided virtually free of charge. Combined with tourism products and especially wildlife, scenic beauty may also constitute a progressive spin-off market in Southern Sudan. But developing the nature tourism market would require the creation of new institutional arrangements and the involvement of new stakeholders.

88. Forest environmental services in Southern Sudan are never accounted for in national Gross Domestic Products (GDP) statistics. Also, there are virtually no developed markets for environmental services in Southern Sudan or incentive schemes that can generate income flows to communities or institutions protecting forests and providing these services. These services have yet to be recognized as potential assets (currently latent) that have the ability to generate financial returns commensurate with their true economic value. There is growing awareness and acknowledgement globally of the need to measure the value of these services, so that decisions involving forest land use change are based on the true worth of forests (i.e. a valuation covering both tangibles and intangibles). There are various reasons for this neglect. Forests being public goods environmental services seem to be non-excludable (i.e. consumers cannot be prevented from enjoying the good or service in question, even if they do not pay for the privilege) and non-rival (i.e. the consumption of a good or service by one individual does not reduce the amount available to others) in character. This has been a major constraint to valuation and packaging of any or a bundle of environmental services for ‘sale’ on the market. Payment for environmental services (PES) would suggest that providers of those services should be compensated for
sustainably managing the forests to ensure long-term provision of those services and those who receive or benefit from the services should pay for their provision.

89. ‘True PES’ schemes, as complement to the conventional ‘PES-like’ initiatives, should be regarded as one of the many tools in the toolbox for good forest management and protection. They provide opportunities to broaden participation in forest management through the establishment of incentive schemes and markets for the four main services mentioned above individually or as a bundle. Few known constraints in the establishment of true PES could include the overarching concerns over equity impacts across board (i.e. the poor, environmental services sellers, and non-sellers) and how best to strengthen cooperative and hierarchical arrangements so as to allow beneficiaries and providers to come together to formulate group payment strategies and tackle free riding. This Note is not in a position to discuss the pros and cons of PES in any detail; however, a significant literature already exists on this topic for further reading.

B.7 Using Technical Approaches to Conservation and Sustainable Management of Forest Resources

90. Historically, timber harvesting in indigenous forests was closely regulated to avoid misuse, and only few species were harvested. However, as far back as the early 1920s, GoSS had recognized the need to augment the timber supply from natural forests and commenced establishing plantations, initially of species such as teak (*Tectona grandis*) and neem (*Azadirachta indica*) and at a later stage fast-growing eucalypts (*Eucalyptus* spp.), *Pinus*, and (*Cupressus* spp.). The emergence of a global market for gum arabic led to a major expansion of planting of *Acacia senegal* as a commercial crop; much of its planting took place in cleared savannah woodlands.

91. Technical Guidelines for sustainable harvesting and management of indigenous forest have been drafted by the MAF based on technical approaches developed by both ITTO and FAO. Guidelines for sustainable management of plantation forests developed by both FAO and by The Forest Dialogue (TFD) provide a solid basis for establishment and plantation management.

92. Technical approaches to management of agroforestry-based farming systems are being supported through joint technical programs with the World Centre for AgroForestry (ICRAF) based in Nairobi, which has supported training of agroforestry extension staff. Technical approaches for improving agroforestry farming systems include, among others, the planting of nitrogen-fixing leguminous tree species, the establishment of shelter belts, planting of improved fruit tree species, and species that provide a source of medicinal products.

93. Whilst the technical approaches needed for achieving effective conservation and management of forest resources are well documented, the main constraints to their implementation are, as already suggested above, the inadequacy of current land tenure and clearly defined access rights.
B. 8 Introducing Predictable and Sustainable Long-term Financing Mechanisms

94. Key issues addressed in this Section are: (i) steps being taken to create a National Forest Development Fund (NFDF) and its role; and (ii) the urgent need to increase annual budgetary resource allocations to forest sector.

95. Policy Statement No. 23 of the 2007 Forest Policy Framework provides guidance on the need to ensure predictable financing for forest management. As a step towards achievement of that goal, MAF has established a NFDF into which 10 percent of all forest fees collected are paid. GoSS is initiating work to further develop this approach and to secure its approval by state governments and the National Assembly.

96. A major constraint to putting in place an effective forest administration has been low budget allocations to the forest sector. Forest revenues are directed to the central Ministry of Finance and are not reallocated to the forest administrations at the national or regional levels. Development and operations budgets from Khartoum and Juba to the regions have dwindled year after year, and so has the ability of the Forest Service to sustainably manage forest resources.

97. Development funds allocated to forestry in the 1980s were only about 1 percent of the total GoSS development budget (despite the fact that forestry contributed about 7 percent of GDP). GoSS officials interviewed reported a universal lack of access to equipment and resources from funds needed both for capital expenditures (e.g. for purchase of vehicles, computers and other equipment as well as funds to pay for ongoing essential operational costs such as fuel and vehicle maintenance). The budget of MAF was reduced from USD 23 million in 2007 to USD 15 million in 2008.

98. In drafting the 2009 budget, it was recommended that the forestry sector receive around 25 percent of the MAF budget, a substantial increase compared to that of 2008. Nevertheless, even if this proposed increase were to take place, it would still be far from adequate for financing the formidable program needed to ensure forest recovery. That fact highlights the importance of GoSS being able to attract additional external donors and private sector technical assistance and investment.

99. The main development partners who are currently providing support for the forestry sector include:

- The European Union which has provided technical assistance for MAF, specifically to support drafting of forestry policy and a MAF strategic plan for the forestry sector. An external consultant continues to be funded to provide policy advice to MAF.
- The Government of Norway, through the Norwegian Forestry Group, is providing support over 3 years (to 2011) for the Land Resource Survey and Information
Unit (LRSIU), to develop a forest resource database, GIS system, and related training and capacity building.

- A partially World Bank-financed Multi-Donor Trust Fund (MDTF) is supporting an Agriculture and Forestry Development Project (SAFDP) which includes financing for strengthening of extension services and training for community-based forestry in five states in Southern Sudan.

- USAID is providing support for the agriculture and environment sectors, including through the Sudan Transitional Environment Program (STEP). Specific support included undertaking a forestry training needs assessment, and financial contributions towards the Kagelu Forestry Training Centre.

- FAO is understood to be interested in supporting work related to land tenure and land management in Southern Sudan.

**C. Summary**

100. Encouraging progress is being made by GoSS in analyzing the potential of the forest resources of Southern Sudan to contribute to poverty alleviation, to accelerated economic growth and to the protection of forest-related environmental services. Policy leaders in the Ministries of Agriculture and Forestry, Animal Resources and Fisheries, and of Environment, Wildlife Conservation and Tourism, who were consulted in the course of drafting this Policy Note all expressed strong commitment to the implementation of the legislative, institutional, and financial policy reforms that will be needed to create an enabling environment for more effective conservation and development of forest resources.

101. An ongoing partially World Bank-supported Agriculture and Forestry Development Project (SAFDP) has helped to initiate a process of forest recovery. However, most of the investment and technical assistance opportunities activities identified in this Note remain significantly underfunded. Thus, there remain opportunities for donor agencies, conservation NGOs, private sector companies, and financial institutions to provide both investment and technical assistance support for scaling up of promising, ongoing initiatives.

102. Figure 2 below attempts to capture the main recommendations of the Policy Note relating to improved forest governance.
RECOMMENDATIONS FOR STRENGTHENED GOVERNANCE FOR FORESTRY IN SOUTHERN SUDAN

Enabling Conditions

Short to Medium Term Priorities
D. Possible Next Steps

103. World Bank Management is discussing with the GoSS and the MAF the possibility of a Workshop to discuss Policies and Strategies for ensuring more effective conservation and protection of Southern Sudan’s forest resources. The issues addressed in this Policy Note will hopefully make a useful input and provide material that will enhance the possibilities for carrying through the difficult policy reforms with which GoSS and the MAF are currently grappling. World Bank experiences developed through an ongoing EU-funded Forest Law Enforcement and Governance Programme and elsewhere may be helpful in assisting GoSS to address those issues.
Annex 1: Forest Legal and Policy Framework in Southern Sudan

1. In 2007, the Forest Policy Framework prepared by MAF was approved by the Southern Sudan Legislative Assembly (SSLA), an important step towards achieving better coherence in the sector. The stated aim of the Policy is to “ensure a sufficient and sustained forest resource base and flow of forest goods and services to support livelihoods and socio-economic development for the present and future generations.” This complements the vision of MAF for forestry, as specified in the Policy, which is “a green Southern Sudan, with fully recovered natural and plantation forests, effectively managed for sustainable socio-economic development.”

2. In a wide-ranging and comprehensive set of 25 policy statements, the Forest Policy Framework sets out broad outlines for the forest sector in Southern Sudan. It categorizes forests into “national forest reserves” (NFRs) to be managed at GoSS-level by MAF, and “state forests” to be managed by the states within which they fall (with technical guidance from MAF). The Policy summarizes the role of GoSS, the states, local authorities, and communities as far as forest management is concerned, emphasizing the importance of collaboration between the GoSS and other levels, and the importance of benefit-sharing with the states and communities. The role of the private sector in forestry and the use of public-private-community partnerships, are addressed. Specific proposals on mechanisms to manage the revenue and proceeds from forest resources are included, as are the principle of market-based pricing and the approach for management of concessions. A strong commitment to sustainable forest management, conservation, and environmental protection is expressed in the Policy.

3. The Policy addresses the essential enabling conditions for development of the sector. It recognizes the need for an updated law that is consistent with the Comprehensive Peace Agreement (CPA) and various pieces of earlier legislation. The need for an adequate institutional framework for management, planning, monitoring, and enforcement is also recognized, with specific proposals such as for establishing a Southern Sudan Forest Corporation (SSFC). Capacity development needs are clearly highlighted, including surveying, inventorying and delineating forest areas, as well as training to develop staff capabilities. The need for mine clearing to make forest areas safe is also addressed.

4. Areas of focus for the forestry sector that are specified in the policy include promoting extensive reforestation and afforestation programs including plantations, as well as agro-forestry and urban forestry, setting up effective forestry management regimes to ensure a sustained supply of wood fuel and construction materials, and streamlining forest governance to ensure the participation of rural communities and enhancing their livelihoods.

5. The Policy document also refers to the MAF five-year strategic master plan 2007-2011, which specifies various objectives and activities for MAF departments, including forestry. While this plan is comprehensive and addresses almost all of the identified needs in the sector, the level of resources needed to implement this plan and its component activities is not fully specified. In addition, the Policy document includes a wealth of information, albeit unconfirmed.
and outdated, on the status of forest resources in Southern Sudan as a whole and in each of its ten states. It includes a map of forest cover based on the Africover dataset, information on prevalent tree species, and the sizes of forest areas in some states.

6. Having developed the 2007 Forest Policy framework, the logical next step would be to follow up with legally binding instruments. Thus, a forest law would be a policy-implementing instrument, and it could help the GoSS to further define and promote its goals. Changes in national policies, or new policies as is the case with GoSS, which incorporate modern principles such as sustainable forest management, should ideally lead to a systematic review of both the formal and informal regulatory frameworks for forests and forestry.

7. The current legal framework for forest management in Southern Sudan comprises the CPA, the interim National Constitution, the interim Constitution of Southern Sudan, a number of different statutory laws at both the national level and at the Southern Sudan level, ministerial decrees and orders, as well as customary law. This arrangement is summarized in the diagram below.

### SUMMARY OF THE LEGAL AND POLICY FRAMEWORK FOR FORESTRY IN SUDAN

- **National**
- **Southern Sudan**

- **Constitutional Framework**
  - Relevant Laws
  - Policies and Executive Orders
  - Customary Law

- **Relevant Laws**
  - Interim National Constitution
  - Forests and Renewable Natural Resources Act, 2002
  - Forest Policy, 1986

- **Repealed Laws**
  - Forests Act, 1989
  - Forests National Corporation Act, 1989
  - Older, pre-independence laws

- **New Laws**
  - Interim Constitution of Southern Sudan
  - Forestry Commission Act, 2004
  - Forestry Training Centre Act, 2004
  - Timber Utilization and Management Act, 2003
  - Forest Policy, 2007
  - Official circular, 2006
  - Ministerial Decree, 2006

- **Various Land Laws and Tenure Arrangements**
  - At national and Southern Sudan levels
applied, for example, regarding the levels of chargeable revenues for the use of forest resources. However, the Ministry of Legal Affairs and Constitutional Development contends that there is no need to apply the 1989 Forest Act, which is in any event repealed, because there are two more recent laws which are applicable. These are the 2003 Timber Utilization and Management Act and the 2004 Forest Commission Act, both of which were signed by the SPLM Chairman and entered into force before the CPA. This lack of clarity is certainly not limited to the forestry sector, but its negative effects are probably more pronounced because of the shared competency over forestry between GoSS and the states.

A. The Comprehensive Peace Agreement

9. On January 9, 2005, the national Government signed the CPA with the SPLM, bringing 22 years of civil war to an end. The CPA explicitly recognizes the deep-seated and complex roots of conflict in Southern Sudan, and seeks to redress the causes. The CPA is the culmination of years of negotiations and prior agreements, such as the Machakos Protocol of July 2002, which established the right of the people of Southern Sudan to control and govern affairs in their region and participate equitably in national governance. The CPA includes six protocols and two annexes. The salient features of the CPA of relevance to the forest sector are:

10. The Power Sharing Agreement: This agreement was signed on May 26, 2004. It provides for a decentralized system of government with “significant devolution of powers having regard to the national, Southern Sudan, state, and local levels of government.” It recognizes GoSS as the link between the national government and the southern states. It also stipulates that Southern Sudanese will have a share in the GoNU, during the transition period of six years. At the end of the six years, the issue of independence of the South will be put to a referendum. It provides the basis for broader participation in government and the civil service and the restructuring of critical national institutions such as the judiciary. The powers of GoSS are listed in Schedule B to the Agreement, and include “national lands and national natural resources” as an exclusive competency. With regard to matters that cannot be dealt with by a single state, for example “natural resources and forestry”, GoSS is also vested with competency. The exclusive powers of the states are listed in Schedule C and include “state land and state natural resources.”

11. The Wealth Sharing Agreement: This agreement was signed on January 7, 2004. It provides for resource allocation and decentralization and for the prioritization of underdevelopment and war impacts as the key criteria for public revenue allocations. The Agreement assigns a 50 percent share of net oil revenue derived from oil production in Southern Sudan, as well as a 50 percent share of the national non-oil revenue collected in Southern Sudan, to GoSS. GoSS and the state governments also secured the right to collect additional domestic revenue and external assistance. In Article 1, the parties commit themselves to “sustainable utilization and control of natural resources.” Article 2 provides that the “regulation of land tenure, usage, and exercise of rights in land is to be a concurrent competency to be exercised at the appropriate levels of government.” It further specifies that GoSS and GoNU will initiate a gradual “process to amend the relevant laws to incorporate customary laws and practices, local heritage and international trends and best practices.” In order to accomplish this, it establishes a National Land Commission and a Southern Sudan Land Commission, which will have broad responsibility for shaping the development of land law.
12. Importantly, Article 2.1 leaves open the issue of “ownership” of land and subterranean natural resources, including in Southern Sudan. The parties merely agreed to “establish a process to resolve this issue” in due time, without prejudice to the position of either party. Therefore, the oft-repeated statement that in Southern Sudan “land belongs to the people” is not actually stated as such in the CPA or in the interim constitution. This may, however, be deducted from the language in Article 180 of the interim constitution, which requires consultation with local communities that occupy or use land resources and compensation for communities in the event that such land is taken away. Further, the statement was widely used as a negotiating position by the SPLM during the negotiations, and although it did not find its way into the CPA, it could be held to reflect the SPLM position.

13. While there is no specific mention of forests in this agreement, the reference to natural resources in Article 1 could be interpreted to include forests. The fact that “sustainable utilization and control” of natural resources is entrenched in the CPA is a useful starting point and goal in the drafting of a forest law. Likewise, on the important issue of land, the emphasis on customary law means that traditional forms of tenure are and will continue to be a major part of land ownership in Southern Sudan. It would be worthwhile therefore for a forest law to give recognition and appropriate support to community forestry.

B. The Interim Constitution of Southern Sudan

14. The Interim Constitution for Southern Sudan closely tracks the CPA in material parts. Regarding land and natural resources, Article 180 states that “land tenure, its use, and exercise of rights to land shall be a concurrent competence, exercised at the appropriate level of government in Southern Sudan.” This provision therefore vests power in the states to also develop laws and policies on land and other natural resources at the state and local government levels. So far, it seems no state has developed laws on forestry or land. Much like the CPA, the constitution goes on to recognize and place significant emphasis on customary land law and to require that “all levels of government should institute a process to progressively develop and amend the relevant laws to incorporate customary land law.” Article 180 also provides that communities should be “consulted and their views taken into account” in any investment decisions to be taken by Government, particularly over the development of subterranean resources. In the event that communities or individuals will lose their enjoyment of rights to land, “prompt and equitable compensation on just terms” should be paid. Like the CPA, the Interim Constitution itself mentions forestry only twice: first in schedule B, that power over “natural resources and forestry” shall be exercised by GoSS in instances where it cannot “be dealt with effectively by a single state”; and secondly, in schedule C, that states shall have the power to develop, conserve and manage “state natural resources and state forestry resources.”

C. National Forest Laws

15. In 1989, Sudan enacted the Forests Act, which repealed and replaced laws that had been in place for more than half a century - the Central Forests Act and the Provincial Forests Act, both enacted in 1932. The Forests Act recognized new types of forest ownership: private, community, and institutional forest reserves to be managed by owners, committees, and
institutions, respectively, in addition to the national and regional forest reserves. Investors in agricultural schemes were obliged to conserve not less than ten percent of the total area of rainfed projects, and no less than five percent of the total area of irrigated projects as shelter belts and windbreaks. Investors were also obliged to convert the cleared trees into forest products. The Act also obliged any driver of a means of transportation, when transporting forest products, to obtain a permit from the competent authority.

16. The Forests National Corporation Act of 1989 established the Forest National Corporation (FNC), a parastatal, service-oriented, and semi-autonomous body, under the direct supervision of the Federal Minister for Agriculture and Forestry. This institutional change was spurred by the findings of the 1984-86 Forest Sector Review. The establishment of the FNC was a drastic change in forestry administration. All forest reserves were placed under the technical supervision of the FNC. Tree cutting outside the reserves was also tightened by the requirement of a license issued by the FNC. As a self-financing entity, the FNC has more functional freedom and flexible procedures in retaining revenue to meet its recurring expenses, namely wages, salaries, operation, and maintenance.

17. In terms of structure, the FNC Act established a board of directors, the position of a General Manager, and a Secretariat. The functions of the FNC were set out in section 4, and included, to: lay down the general forest sector policies; make rules on effective utilization and development of forests and achieve full protection of the environment; propose laws that achieve the implementation of the approved policies for the development of forests; technically supervise all forests of the country; disseminate information and create awareness about forests; conduct studies on forestry issues and carry out forest planning; increase the reserved forest areas up to a minimum of 20 per cent of the area of the country; intensify tree plantation and supply seedlings; develop gum acacia and other minor forest products; and coordinate with other bodies to implement forest policies, particularly projects combating desertification.

18. In 2002, the 1986 and 1989 laws were merged into one law, the Forests and Renewable Natural Resources Act. This Act provides the framework for the management and protection of forests and renewable natural resources including pastures, rangelands, and certain other aspects of agricultural land use, as well as the framework governing the management of the forestry sector. Under this Act, federal forest reserves are managed by the FNC, while state forest reserves are managed by the states in accordance with FNC’s policies and technical plans. The law also encourages private, communal, and institutional forests.

19. The 2002 Act is different from the 1989 Act in three main ways: (a) it expanded the scope of coverage beyond forests to include other renewable natural resources such as pasture and range; (b) it consolidated the substantive forest management issues with the institutional structure for forest management; and (d) it put greater emphasis on environmental concerns related to forestry. In effect, it merged the Forests Act of 1989 with the FNC Act of 1989 into one law, and then added conservation and management of pasture, range and soils.

---

1 The Forest Sector Review was led by the World Bank and included, FAO, UNDP, USAID, The Netherlands, FINNIDA, the Canadian International Development Agency, DANIDA, the British Overseas Development Agency (now DFID), GTZ, and the Norwegian Ministry of Development Cooperation.
20. Experience with the 1989 Acts and the 2002 Act has shown that both were only barely enforced. Statistics of forestry offences registered with the police and pending police investigation are indicative of this. The number of cases that were brought to trial after the completion of the investigation is extremely low, and the number of cases that were tried is also very low. The reasons for this incapacity in law enforcement are, undoubtedly, the poor legal machinery, the lack of resources, and the inexperience of the prosecuting bodies. Furthermore, in the case of Southern Sudan, the FNC has had virtually no involvement in Southern Sudan for many years.

21. One of the factors impairing the implementation and enforcement of the forestry legislation is the difficulty of ascertaining or identifying forest reserves on the ground. Forest reserves are clearly shown on maps, but their boundaries are generally not visible. Neither the 1989 Forest Act nor the 2002 Act define the term “forest”. Under the 2002 Act, the word “tree” means any tree including bushes, palms, bamboos, shrubs, brushwood, creepers, and climbers at all stages of their growth. A reserve area is defined to include an area or any part declared to be a national forest reserve, state forest, or other forests or enclosure, whether covered with trees or not.

D. New Sudan Laws

22. An official GoSS circular in 2006, clarifying the law applicable in Southern Sudan, states that New Sudan Laws – those laws enacted in SPLM-held areas during the conflict years – are part of the legal framework. These would therefore include two laws of direct relevance to the forestry sector: the Timber Utilization and Management Act of 2003, which is principally concerned with the procedure for the issuance of timber utilization contracts, and the Forestry Commission Act of 2004, which is mainly concerned with the establishment and functions of a forestry commission to manage the forests of Southern Sudan. However, according to officials of MAF, neither of these laws is actually being applied.

23. The 2003 Timber Utilization and Management Act requires all applications for allocation of a timber utilization contract to be accompanied by a harvesting plan, an assessment of environmental impact, evidence of financial ability of the applicant, and a proposal of assistance to the communities interested in the applicant’s proposed area of activity. The law also establishes a timber rights evaluation committee, which will be responsible for evaluating applications, ranking the applicants, and making recommendations to the Forestry Commission regarding the suitability of each of the applicants.

24. The non-implementation of this Act was demonstrated clearly in discussions with MAF officials regarding the framework in operation for timber concessions. Despite the fact that the Act contains an annex of a timber utilization contract, the two concessions which have been issued by MAF recently were done without any formal legal basis, and without regard to the procedures in the Act.

---

25. The 2004 Forestry Commission Act establishes a Forestry Commission to be responsible for the “regulation, management and utilization of forests and forest resources” of Southern Sudan, as well as the “coordination of forest policies.” It is set up as the primary forest institution with powers ranging from advising on national policies, to information dissemination, approval of investment proposals in relation to the forest sector, and so on. However, officials at MAF professed a lack of awareness of the existence of this law. Given that the Forestry Commission has never been formed, and the Directorate of Forestry within the Ministry is charged with carrying out all the executive functions relating to forestry, it is unlikely that a Forestry Commission will be established as set out in the Act. If it is formed, then the Commission will have to take over many of the functions currently performed through the Directorate.

E. GoSS Official Circular on the Rule of Law Institutions

26. According to an official GoSS circular of 2006 that clarifies the law in force, “Sudan is one country with two legal systems.” This means that Southern Sudan “shall be governed by non-Sharia laws” and quite importantly, that “all the current laws, National and New Sudan laws, shall continue to operate in Southern Sudan until new actions are taken [that is,] until Southern Sudan laws are enacted in accordance with its competencies.” Read in tandem with the relevant parts of the Machakos Protocol, and the Interim Constitution of Southern Sudan, it is clear that all the current laws in Sudan apply in Southern Sudan, with the exception of those that are Sharia-based. The immediate implication of this is that the 2002 Forests and Renewable Natural Resources Act enacted by the national government before the CPA is applicable in Southern Sudan.

27. However, the circular then goes on to add language that states:

*Pending the enactment of Southern Sudan laws by the Southern Sudan Legislative Assembly, the following laws shall continue to operate in Southern Sudan: 1. All the New Sudan laws of 2000 to 2004 that fall within the competencies of the Government of Southern Sudan; 2. The Government of Sudan laws of 1974 that fall within the competencies of the Government of Southern Sudan in the areas not covered by the New Sudan laws; 3. Customary laws; 4. The principles of justice, equity, and good conscience in areas that are not covered in the above.*

28. There is an apparent contradiction in the circular, i.e. while the first part clarifies that all current national laws are applicable, the quote above injects some doubt and uncertainty. Is it only those ‘national’ laws enacted in 1974 which are applicable in Southern Sudan, or all the legislation in force in Sudan in 1974? What about the laws enacted thereafter, until now, which are not based on Sharia law and therefore qualify as “all the current laws” from the first part of the circular? This is further complicated by the Southern Sudan Forest Policy of 2007 which states that the national Forest Policy of 1986 and the national Forest Act of 1989 “are still active in Southern Sudan.”

---

applicable to date” especially with regard to the gazettment of forests and reservations. This complicates matters for two reasons: first, because it appears to contradict what is otherwise clarified by the official circular above; and second, because the 1989 Act is no longer in force as national law, having been repealed and replaced by the national Forests and Renewable Natural Resources Act of 2002. These ambiguities make the case for reform of the legal framework for forestry in Southern Sudan all the more urgent, for which there is a serious need for comprehensive and coherent new legislation which takes into account existing national laws and New Sudan laws.

F. GoSS Ministerial Decree

29. The 2006 Ministerial Decree banning illegal logging in Southern Sudan was issued to give the government time to lay down systematic procedures for the control of logging. This decree prohibited the export of teak and mahogany. It also cancelled all 11 contracts for forest utilization in support of the war effort that did not have a formal legal basis. The decree also covered the appointment of forest guards, the registration of private plantations, and the issuance of licenses to private plantation owners, as well as the licensing of individuals to undertake trade in forest products such as charcoal.

G. Land Laws and Land Tenure Issues

30. There are four land tenure systems in Sudan: (a) communal ownership in much of rural Sudan; (b) individual registered ownership, either as freeholds or leaseholds, in riverine and urban areas, as well as irrigated, mechanized, or rain-fed agricultural land; (c) government-owned land as per the relevant statutory law; and (d) private lands.

31. Land laws in Sudan comprise both statutory law and customary law. Land in Sudan is primarily regulated through the Land Settlement and Registration Act of 1925, which remains in force, and the Civil Transactions Act (CTA) of 1984, which replaced the Unregistered Lands Act (ULA) of 1970. Other statutory instruments include the Limitation and Prescription Ordinance of 1928 and the Land Acquisition Ordinance of 1930. On the other hand, customary land law is central in the resolution of land claims throughout the country, especially in rural areas including in the South. However, it poses a special challenge in practical application because it varies from community to community – it is largely oral, unrecorded, and dynamic.

32. The most comprehensive piece of legislation on land tenure in Sudan is the CTA. It is particularly important because it deals with the concept of state and private ownership. In this respect it declares that “All waste, forest, occupied, unoccupied and unregistered land is deemed to be Government property and to be registered under the Land Settlement and Registration Act 1925.” Moreover, the scope and effect of the CTA is uncertain because many of its concepts and terms in relation to land are not defined. For instance, the precise dimensions of the key concept of “Muat” (meaning whoever brings into use formerly idle land far from urban areas whether by cultivation, building or irrigation, is fully entitled to it) remain unclear. Besides a usufruct acquired by possession or prescription, it is not clear whether waste land, where no rights can be acquired as such, is a Muat. Further, under the CTA all fallow land in the country is treated as pasture, and therefore the government can place restrictions on grazing and allocate such lands to
communities. The CTA also incorporates the thrust of the ULA (to the effect that private citizens cannot hold absolute title to land except in case of the land registered as freehold prior to 6 April 1970). Any freehold ownership registered on or after that date shall be regarded as leasehold property. Such leasehold property like freehold is not subject to compulsory acquisition by the state, except for public purpose and on payment of a fair and just compensation.

33. The CTA prohibits litigation with regard to any question of title to land. It precludes the courts from having any jurisdiction to entertain any proceedings with regard to any question of title to land which is owned by the government. Furthermore, the CTA was amended to the effect that the courts are precluded from entertaining any proceedings against the government and the registered owner of an investment land allotted by law.

34. The Land Settlement and Registration Ordinance of 1925 (LSRO) provided a legal basis for the registration of land, for which the system is still largely in force to date. The LSRO defines land to include benefits that arise out of land, buildings, and things permanently fixed thereto, and also any interest in land which requires or is capable of registration under the ordinance. These would include cultivation, pasture, and forest produce. These rights fall within the purview of what land is, simply because they relate directly to the use of land, in other words, usufruct. Usufructs may be registered in the name of whoever satisfies the land registrar as having a valid claim to their ownership. Under the LSRO registered land is subject to rights and interests even without notification in the register, such as the right of way, easements, and the right to exploit mines and minerals.

35. The LSRO only covered limited areas of Sudan, and did not provide stable tenure for all land in Sudan. It only provided a mechanism for the registration of land in towns, agricultural schemes and riverine areas along the Nile. Vast parts of the country were and still are unregistered or simply unoccupied. For this reason, a rebuttable presumption was deemed to subsist to the effect that unoccupied land belonged to the government. A person who could prove ownership of land or prescriptive possession could rebut the presumptive ownership of the government, and in the case of failure to prove full ownership or other lesser right on it, the land was to be deemed or registered as government-owned land.

36. The Southern Sudan Land Commission (SSLC) was established on June 27, 2006, with the primary role to develop the Land Policy of Southern Sudan. Although this policy is still under preparation, a Land Act (2009) has already been passed by the Southern Sudan Legislative Assembly (SSLA), as an interim measure to resolve existing land disputes, with due consideration to customary law and the interests of communities. According to Section 5 of this Act, the Act’s objectives, among others, are to: (i) ensure equal rights to acquire or own land; (ii) recognize customary law and practices and customary land rights; (iii) establish a land administration system; and (iv) promote a land regime in favor of investment.

37. Consistent with the principle of decentralized governance in Southern Sudan, land tenure and administration under the Land Act are managed at the level of GoSS, state governments, county authorities, and payam councils, as appropriate (Chapter VII). The Land Act reaffirms the existing customary principle under which land is owned by the people of Southern Sudan, with its usage regulated by GoSS. There are three categories of land defined in the Act: (i)
public land owned collectively by the people of Southern Sudan and held in trust by the appropriate level of government (Section 10); (ii) communities’ land held by communities (Section 11); and (iii) private land (Section 12).

38. The Act provides for legal protection of land ownership for communities, individuals, and the government of Southern Sudan, and access to land for non-Southern Sudanese under a leasehold system. It also recognizes customary access rights and gives authority to the states to regulate such access for agricultural activities, without undermining the primary ownership interest (Section 6.5). The allocation of customary rights to land is done by the traditional authority, in consultation with other members of the community. These customary rights may be cancelled by the same authority, and notified to the administrative authority, if the owner fails to observe any condition or restriction attached to the right.

39. The Land Act provides specific provisions on land-related investments. According to Article 61, GoSS and each state may adopt a land zoning system in consultation with communities to allocate specific lands to economic investors. Communities must be compensated for loss of their lands (Section 64), and their interests must be taken into account in the activities undertaken on these lands (Section 63). The Land Act is also innovative in terms of environmental protection. Any investment is subject to an environmental, economic, and social assessment (Section 70). In case of environmental degradation, the investor and the administration concerned at GoSS or state level shall restore the land and provide compensation to the affected populations (Section 71). It also provides for a resettlement plan for communities affected by an expropriation for public interest (Sections 72 and 75).

H. Customary Law

40. Customary law is a major part of the legal system in Southern Sudan. It is recognized as such in Article 3.2.2 in Part C of the CPA, in Article 3.2.2 of Part C of the Machakos Protocol, and in Article 5 of the Interim Constitution of Southern Sudan. Section 5 of the national Civil Justice Act of 1983 states that customary law shall apply in any suit on questions regarding succession, inheritance, wills, legacies, gifts, and matters of personal law, as long as it is not repugnant to justice, equity, and good conscience. Customary law is sometimes the only regulatory framework, for the management of land, both for cultivation and pasture; under communal ownership systems, customary land law plays a central role in dispute resolution and also in general land use. In this regard, traditional forestry management systems in Southern Sudan are analyzed in a separate section below.
Annex 2: Summary of Policy Statements in the Southern Sudan Forest Policy Framework

1. The GoSS-MAF will sustainably manage and administer all Southern Sudan reserves previously under the Government of the Sudan as “national reserves” for stabilization of environment, research, seeds production/bulking, and trading development through a public-private community partnership approach to ensure sustainable forestry development, utilization, and socio-economic prosperity.

2. The state directorates of forestry will managed and administer state forest lands (previously provincial forests) and protect such lands under technical guidance of the MAF. Individuals and companies should be able to obtain land lease for purposes of establishing forests. This policy anticipates congruent outcomes from the ongoing land reform process.

3. The GoSS-MAF shall undertake and build up a database of plantations and natural forest reserves by conducting forest surveys (re-survey old properties) inventories, and gazetting new forested lands.

4. The GoSS will take over and assume responsibility for all GoSS national forest reserves (NFR) in Southern Sudan and will ensure that they are protected and managed sustainably. The Directorate of Forestry of the MAF will be responsible for effective management of GoSS NFR in formalized partnerships with state governments and local communities to include provisions for sharing of benefits accruing from the forest resources.

5. The MAF Directorate of Forestry will delineate between various types of national and state natural woody vegetation as required for conservation of biodiversity to support local and national/state socio-economic development and international obligations. The MAF Directorate of Forestry will ensure that state governments’ forestry departments are empowered to protect and manage sustainably.

6. The GoSS-MAF and state governments will enter into collaborative partnerships with rural communities for sustainable management of forests, in ways which also ensure fair sharing of benefits.

7. The MAF Directorate of Forestry will develop a new Forest Act and subsidiary legislation for Southern Sudan and will, among other things, ensure the smooth implementation of these new policy dimensions.

8. There will be accelerated development of forest plantations in GoSS NFRs, other public lands, community lands, and in urban and peri-urban areas, in order to meet present and future local wood demands and for export. The policy will be implemented by the relevant levels of government and communities under the overall supervision of the GoSS-MAF.
9. The Directorate of Forestry MAF will establish, regulate, and review prices of forest products and services to ensure transparency and fairness among the various stakeholders throughout Southern Sudan in consultation with the GoSS ministries of finance and economic planning, commerce, trade, and supply, and the relevant state government authorities. In all cases, pricing policy will be driven by free market forces taking into account fair production and processing costs.

10. The GoSS-MAF and state governments will formulate and implement credible plans and monitor progress in forestry resource development. The ministers responsible for forestry policy implementation will present annual reports to the respective legislative assemblies on the status of the forests and progress in implementing forestry development plans in their states. The GoSS-MAF will present its report to the GoSS Council of Ministers and the Southern Sudan Legislative Assembly, respectively.

11. The primary role of the Directorate of Forestry of the GoSS will be to provide regulation, coordination, and operational standards for a vibrant forestry sector. The Directorate of Forestry will enter into partnerships with state governments, communities, and the private sector in implementation of this policy, as well as GoSS and states’ forest plans.

12. Strict measures will be upheld to prevent changes in boundaries of GoSS-NFR and other protected forests. Only the GoSS Minister responsible for forests will take responsibility for any changes in NFR boundaries upon approval by respective legislative assemblies.

13. The GoSS-MAF shall take early deliberate steps to establish the Southern Sudan Forest Corporation (SSFC) which will function efficiently in business-like fashion. Moreover, the SSFDC shall be promoted and supported to be a semi-autonomous, self-supporting, and income-generating institution operating under a board of directors.

14. The GoSS-MAF Directorate of Research and Training shall constantly endeavor to build capacities of MAF and states’ forestry staff, community groups/association members by training and short course work in forestry and forestry-related disciplines.

15. In order to ensure high and uniform standards of practice throughout Southern Sudan, the Directorate of Forestry of MAF will second and support recruitment of technical staff to respective state governments (counties and payams). This will include trained forest guards armed with firearms to ensure effective protection and enforcement of forestry regulations, rules, and laws.

16. The private sector will be encouraged to invest in forestry industry in the central forest reserves (GoSS), state forest reserves, and county and community lands under public-private-community partnerships. This will be promoted through fair, transparent, and legally secure long-term planting and harvesting concessions in public and community lands.
17. The GoSS-MAF, in collaboration with demining agencies/commissions, will identify mine-infested forest lands and arrange for speedy de-mining operations to ensure safety of implementing development activities.

18. The GoSS-MAF and state governments will take effective measures to safeguard and protect all forests and woodland throughout Southern Sudan. Setting fire or cutting trees in any forest and/or woodland in Southern Sudan is hereby declared a crime, except when permission from the GoSS Forestry Department, state forestry department, or the local government forestry department is obtained for local communities’ use other than commercial purposes. The possession of private unlicensed sawmills and/or any commercial tree cutting equipment is also declared illegal. This policy will be vigorously enforced in Southern Sudan to step out the current serious forest and woodland degradation.

19. The GoSS-MAF shall endeavor to review environmental impact assessments pertaining to oil exploration and prospecting companies operating and affecting forests and woodlands to confirm with international standards. Reimbursements and compensations shall be sorted where massive deforestation occurred.

20. The GoSS-MAF and states’ ministries of agriculture shall support local communities’ forestry organizations and social forestry programs, which preserve communities’ rights and ownership and reap benefits accruing from forest resources. Indigenous industries (gum, honey, latex, silk production) shall be supported and enhanced.

21. The GoSS-MAF and state governments will take account of the full value of forest services in their accounting and budgeting systems. In addition, the GoSS-MAF will promote and facilitate access to emerging benefits from global forest services, such as carbon sequestration and biodiversity conservation funds. The GoSS-MAF will explore and enter into carbon credit trade for socio-economic development in Southern Sudan.

22. The GoSS-MAF and state governments shall initiate and promote enrichment plantings with appropriate tree species along water courses, watersheds, and wildlife sanctuaries/reserves to protect ecological imbalances and preserve environmental resilience.

23. A National Forest Income Retention Scheme (NFIRS) will be introduced and GoSS-MAF and state government levels based on an agreed percentage from revenue sharing. In addition, GoSS-MAF will establish a Southern Sudan Forest Fund (SSFF) to support capacity building, forest conservation, and management activities now and into the future.

24. The GoSS-MAF will maintain close network and working linkages with state governments and other players such as NGOs, CBOs, and private investors to ensure effective implementation of this policy.
25. The GoSS-MAF shall strengthen and enhance an integrated forest management strategy in order to promote biodiversity growth of rangelands, endangered species preservation, fodder, and water conservation concepts.
A. **GoSS Institutions**

1. The Ministry of Agriculture and Forestry (MAF) is the ministry responsible for forest affairs, formed in October 2005. MAF’s vision for the forestry sector is “a green Southern Sudan, with fully recovered natural and plantation forests, effectively managed for sustainable socio-economic development.” In this regard, MAF’s mandate is to: (i) define policy frameworks that would enable agricultural and forestry development through decentralized provision of services, (ii) provide technical and planning guidance to state agricultural administrations, (iii) coordinate state activities, and (iv) identify and prioritize forest investment projects to be financed from the GoSS budget.

2. The structure of MAF has been organized around five general directorates. Two directorates are functional: Planning and Programming, and Finance and Administration Directorates; while three are technical: Agriculture, Forestry, and Research. Two Under-Secretaries - one for agriculture and one for forestry - oversee the day-to-day activities of the Ministry. Within MAF, the Forestry Directorate (FD) is responsible for forests management and development. Headed by a Director General, FD comprises 6 Directorates:

   - Forestry Utilization;
   - Agro-Forestry and Forestry Extension Services;
   - Forest Industries;
   - Special Forestry & Natural Programmes (including Community & Social Forestry, Forest Conservation & Reservation, Forest Research & Training; Planning & Program);
   - Afforestation & Natural Forest; and Forest Survey and Inventory.

3. The Kagelu Forestry Training Center (KFTC), established near Yei (Central Equatoria State) under the USAID-funded Southern Sudan Agriculture Revitalization Program (SSARP) in 2002, has the mandate to provide the technical skills required for the development of the forestry sector, i.e. to train civil servants and private sector employees. USAID financial support to KFTC, initially through SSARP program, and then continuing through the Sudan Transitional Environment Program (STEP), ended in September 2008. From then on the Centre was expected to be funded by GoSS/MAF and funds generated from training fees.

4. Along with MAF FD, other GoSS ministries that have a direct impact on forest resources include the Ministry of Animal Resources and Fisheries (MARF), Ministry of Housing, Physical Planning & Environment (MHPP&E) and the Ministry of Wildlife Conservation & Tourism (MWCT). MARF, as the ministry overseeing fisheries and livestock development, is in charge of policies to regulate grazing and support investments to rehabilitate interstate stock routes. Stock routes often transit through forest areas, especially in the Upper Nile and three Equatoria states, where forest cover is dense and cattle trade routes linking Southern Sudan to neighboring countries are many. If stock routes are not clearly demarcated and maintained, cattle tend to drift away for grazing, which often results in damages to trees and shrubs. MWCT’s role in relation to
5. As mentioned in the section on land laws above, the Southern Sudan Land Commission (SSLC) is in charge of designing the land policy for Southern Sudan, which will help clarify land ownership and trade modalities – this will have direct implications on forest lands. It is understood that the Land Act of 2009 has been passed by SSLA, but that the land policy has yet to be fully developed.

6. The GoSS has formed a Sector Working Group (SWG) for the Natural Resources and Rural Development (NR&RD) sector. The SWG includes five ministries and one agency: MAF, MARF, MWCT, MHPP&E, the Ministry of Cooperatives and Rural Development (MCRD), and SSLC. The working group’s main purpose is to promote coordination among GoSS institutions and facilitate coordination with donors.

7. The Ministry of Finance and Economic Planning (MoFEP) also plays a crucial role, as it is currently the sole institution responsible for procurement and financial management in Southern Sudan - MAF has not yet been granted procurement and financial management autonomy. Main procurement activities to support MAF development - e.g. building renovation work, equipment, and vehicles - have been supervised by MoFEP and undertaken by MoFEP external procurement advisors. In terms of budgeted funds, MoFEP receives transfers from GoNU that it redistributes to GoSS ministries according to the annual budget approved by the Southern Sudan Legislative Assembly (SSLA).

B. State Administration and Local Government

8. The states have the mandate to implement GoSS policies; they are responsible for administrative and technical coordination of the work of the local governments. In each of the ten states of Southern Sudan, there is a state Ministry of Agriculture, Animal Resources and Irrigation (SMAARI). The SMAARIs are responsible for forest resources management. The day-to-day activities of the SMAARI are supervised by a Director General, who reports to the State Minister. The Ministry has five Directorates: Agriculture, Research, Animal Resources, Forestry, and Irrigation.

9. The main task of the local government is to maintain law and order; it is also responsible for service delivery to the population. Local government has a four-tier structure (see Figure 4 below) which integrates statutory and traditional structures of authority. It includes: (i) the county office, (ii) the payam administration, (iii) the boma administration, and (iv) the community clan/village level. Each county generally consists of four to six payams, with the population of a county averaging around 100,000 people. Each payam in turn consists of five to seven bomas. A boma consists of a group of three to four communities on average, with each community in turn made up of around 150 households.
10. At the county level, administration of the county office is headed by a Commissioner, who is appointed by GoSS. Alongside the Commissioner’s office are the Executive Director’s office and the technical departments of Education, Health, Public Works, Agriculture, Social Welfare, Community Development, Planning, Law Enforcement, and General Administration. The Sudan Relief and Recovery Commission (SRRC), also represented at the county level, is in charge of monitoring humanitarian issues. The Agriculture Department is headed by a Director General; there are directors for Agriculture, Animal Resources, Fisheries, and Forestry, as well as technical staff.

11. At the payam level, the government is represented by a payam administrator, assisted by a deputy and a clerk. The payam administrator reports to the County Commissioner. Payam administrations are delegated judicial powers and service provision functions for health, education and agriculture extension (including forestry). The boma is headed by a chief who is the boma administrator and is generally nominated by the sub-chiefs who head communities at the clan/village level. Traditional authorities are represented by an executive chief at the payam level; the executive chief is designated by the boma chiefs. In turn, at the county level, there is a paramount chief nominated by the payam executive chiefs.

12. The function of the traditional administration includes resolving minor conflicts, maintaining law and order, and collecting taxes. The chiefs also play a vital role in natural resource management: they define the territorial boundaries of the community and act as the custodians for land of the community members. The boma and payam courts are the institutions through which traditional authorities deliver justice, thus alleviating inter- and intra-community tensions. The boma court is headed by the boma chief and selected community representatives; it usually integrates the village teacher, representatives of women and youth, a church leader, and a person responsible for land allocation. The payam court is headed by the executive chief. The boma court delivers justice on relatively minor issues (e.g. family disputes, minor acts of violence, disagreement between two household); it also addresses boma-related land issues (e.g. disputes over land demarcation or allotment, land allocation to returnees). The payam court deals with cases that cannot be solved at the boma level (e.g. land disputes that span more than one boma or inter-community disputes). Severe acts of violence, inter-clan clashes or complex land disputes are referred to the payam or the county administrators. In any case, the latter are to be consulted on cases treated by the payam court; they have the latitude to refer any cases they consider beyond the mandate of the payam courts to statutory law courts. Local communities often prefer the traditional courts because they stress reconciliation and compensation rather than facing the fines and prison sentences delivered by the statutory courts.

13. The Local Government Act of 2006 mentions the need to establish grassroots planning structures that would build on existing traditional governance structures. These structures take the form of payam and boma development committees, integrating key community representatives. The purpose of these committees is to prioritize service needs of the rural populations. This assumes that, because they reflect the different components of the communities and have a thorough knowledge of the context and needs of the community they represent, they have the necessary capacity and legitimacy to undertake planning work. Some of these committees are already active.
Annex 4: Summary of the Southern Sudan Land Act of 2009

1. The key objectives of the Land Act are to: (i) resolve land disputes, taking due consideration of the customary practices and interest of the people of Southern Sudan; (ii) ensure equal rights to acquire or own land for the people of Southern Sudan, legal entities, communities, State Governments, and Government of Southern Sudan, as regulated by law; and (iii) recognize customary law and practices related to land owned by communities as part of the normative system of land regulation as long as they are consistent with the provisions of the Interim Constitution of Southern Sudan 2005, this Act, and other laws.

2. The land ownership is divided into three categories: Customary, freehold, and leasehold ownership. The recognition of customary law in the access to land represents a particularity of the Act which also defines general principles for the exercise of right in the lands in SS, such as public consultation and participation. Communities enjoying rights to land shall be consulted and their views duly taken into account in decisions to develop subterranean natural resources in the area in which they have rights; they shall share in the benefits of that development. Rights to land owned by the Government of Southern Sudan shall be exercised through the appropriate or designated level of government in Southern Sudan, which shall recognize customary land rights under customary land law.

3. To reinforce the protection of customary land rights, the Act states that: (i) Rights in land under customary tenure shall be assured security of occupancy irrespective of whether or not their interest is held individually or in association with others; and (ii) customary land rights, including those held in common, shall have equal force and effect in law with freehold or leasehold rights acquired through statutory allocation, registration, or transaction.

4. The Act provides for three categories of land: (i) Public Land defined as land owned collectively by all people of Southern Sudan and held in trust by the appropriate level of government; (ii) Community Land held by communities and identified on the basis of ethnicity, residence, interest as community forests, cultivation, grazing areas, shrines, and any other purposes recognized by the law; and (iii) Private Land defined as registered land held by any person under a freehold tenure or leasehold tenure.

5. The traditional authority within a specific community is empowered to allocate customary rights to land for residential, agricultural, forestry, and grazing purposes. The determination of the size and boundaries of land allocated is subject to consultation with members of the community, in accordance with customary law and practices. The traditional authority is required to notify the County Land Authority or the Payan Land Council, prior to the allocation of customary land right.

6. One of the particularities of the Land Act is reflected in the chapter relating to land use, social, and environmental preservation. Individuals, communities, and organizations are required to protect the lands in order to preserve its productivity and avoid land degradation. Any allocation of land for investment purposes shall be subject to a social, economic, and environmental impact assessment to ensure that the social, economic, and environmental implications of the activities on the land are taken into account before any decision is made.
thereon. This assessment shall be undertaken for both public and private activities. The assessment shall include environmental restoration and resettlement plans.

7. The Government of Southern Sudan, State Governments, and any other Public Authority may expropriate land for public purposes subject to compensation. The Ministry of Housing, Land and Public Utilities, in consultation with the duly constituted committee, shall carry out any expropriation plan initiated by the Government of Southern Sudan in coordination with the State Government.

8. Expropriation of land shall be undertaken only for a reason of public interest. Public interest includes but is not limited to:

   a) exclusive government or general public use;
   b) planning of a new Government area or an extension or improvement of existing Government premises;
   c) sanitary improvements and urban development;
   d) social housing, resettlement, and reintegration;
   e) control over land contiguous to any port, airstrip or airport;
   f) control over land required for defense purposes;
   g) control over land whose value is enhanced by the construction of a railway, road, or public works about to be undertaken or provided by the Government; and
   h) any other activity with a public purpose undertaken by the government as specified by any other law.

9. The expropriation of land shall be accompanied by compensation measures. Compensation shall be just and equitable and shall take into account the following factors:

   a) the purpose for which the land is being utilized;
   b) the land market value; and
   c) the value of the investment in it by those affected and their interest.
Annex 5: Suggested Criteria for Enhancing the Prospects for Successful Engagement with Local Communities

There are numerous facilitating criteria which help enhance the prospects for successful engagement with local communities. These include:

1. Resource boundaries should be clearly defined for individuals or households with rights to use and manage resources.

2. The higher the cost of an exclusion technology (e.g. fencing), the better the chances of success. However, this tends to apply only if local stakeholders are the ones shouldering these expenses (author addition).

3. Congruence between appropriation (use) and provision rules and local conditions.

4. Relationships between resources and user groups:
   - Location: Success is likely to be enhanced by overlapping between the location of the common-pool resources and the residence of the users.
   - Users’ demands: The more vital the resource, the greater the chances of success.
   - Users’ knowledge: The more their knowledge of sustainable yields, the greater the chances of success.

5. User groups
   - Size: The smaller, the better. Some authors suggest that a user group has a greater chance to collapse when it is comprised of more than 30-40 members.
   - Boundaries: The more clearly defined the boundaries of the group, the greater the chances of success.
   - Relative power of sub-groups: The more powerful the beneficiaries from retaining the commons, the better the chances of success.
   - Existing arrangements for discussion of common problems: The better developed these are, the better the chances of success.
   - Extent to which users are bound by mutual obligations: The more these obligations relate to social reputation, the better the chances of success.
   - Punishments against rule-breaking: The more users already have joint rules and graduated sanctions, the greater the chances of success.
   - Consensus about who are the users: This must be negotiated at the onset of the creation of the user group.

6. Collective-choice arrangements

Most individuals affected by operational rules can participate in modifying these rules.
7. Monitoring

Monitors, who actively audit resource conditions and user behavior are accountable to the users and may be users themselves.

8. Conflict resolution mechanisms

Users and their officials have rapid access to low-cost, local arenas to resolve conflict among users or between users and other stakeholders.

9. Minimal recognition of rights to organize

The rights of users to devise their own institutions are not challenged by external governmental authorities.

10. Nested enterprises

Appropriation, provision, monitoring, conflict resolution, and governance activities are organized in multiple layers of nested enterprises (possibly linked with other democratically-based political institutions).

*Source: Hobley (1995), cited in Dubois (1999).*
Annex 6: Community-based Management Experiences from Tanzania and Zimbabwe

TANZANIA

Tanzania has had a rapid evolutionary history of community participation in forest management (CPFM) and community-based forest management (CBFM) through numerous projects such as the Hifadhi Ardhi Shinyanga (HASHI) Soil Conservation Project in the Shinyanga Region, the Land Management Project in the Arusha Region, the Hifadhi Mazingira (HIMA) Environmental Project in the Iringa Region, the Soil Erosion Control and Agroforestry Project (SECAP) in the Tanga Region, and the Forest Resources Management Project (FRMP) in the Tabora and Mwanza regions. With the adoption of the revisions of the forest policy in 1998, local communities got encouraged to co-manage forest reserves with the Forestry and Beekeeping Division (FBD) of the Ministry of Natural Resources and Tourism (MNRT) through special agreements – joint management agreements. Opportunities for community participation in forest management were created through the proclamation of the 1998 National Forest Policy, which was quite clear on the need to bring unreserved forests and woodlands under the jurisdiction of local communities as “village forest reserves”, and local communities became encouraged to go into co-management arrangements with government through special agreements, namely, joint forest management (JFM). Under JFM, local communities are granted co-management authority under special agreements to manage parts or all of forest reserves.

1. The Hifadhi Ardhi Shinyanga (HASHI) Soil Conservation Project

Objective: To combat serious land degradation in the Shinyanga Region by devolving as much as possible the control of natural resources management activities to the local communities in order to enhance the sustainable livelihoods of rural people.

Project start year: 1986
Location: Shinyanga Region with 800 beneficiary villages
System of management adopted: The “ngitiri” system, an indigenous forest and woodland management system that depends on natural regeneration and which is also guided by customary laws. Ngitiri is also a portion of land protected from farming and grazing for a specified period of time to allow natural regeneration of trees, shrubs, and grasses. The ngitiris provide products such as fodder and poles.
Progress: Project led to a wider participation of various stakeholder groups in 800 community set-ups. A 2000 inventory of the project indicated that 71,154 ha of ngitiris were owned by villages, institutions, groups, schools, and households. Forty percent of the households in each of the villages owned an average of 1.5 ha (range 0.1 to 215 ha for households). The size of communal (village) ngitiris ranged from 3 to 1,650 ha. Religious organizations owned 1,700 ha, prisons 325 ha, people’s development colleges 60 ha, and the Traditional Healers’ Association in Maswa village 15 ha.
2. The Land Administration Project (LAMP) in Arusha Region
Objective: To promote the utilization and management of natural resources on a sustainable basis.
Project start year: 1988
Location: Arusha Region
System of management adopted: Community enclosures that were gazetted as village reserves by the Forestry and Beekeeping Division.
Progress: Project led to wider participation by local communities at the forest fringes in forest and woodland management. Eight village communities at the fringes of the Duru-Haitemba woodland obtained management permission from the FBD to manage this woodland as a reserve. The Duru-Haitemba is considered a model for community-based forest and woodland management in Tanzania. The Duru-Haitemba experience was made possible because the eight villages that surround the woodland area have defined boundaries and democratic governments. The experience gained from the Duru-Haitemba has been adopted in the Singida Region and scaled up by the FBD in the 40,000 ha Miombo woodland in Mgori.


3. The Gologolo Village Forest Management Area
The Gologolo Village Forest Management Area represents a model community-managed reserve in Tanzania. This reserve, with 5,300 ha (made up of 1,300 ha of commercial plantation and 4,000 ha of natural forest), and forming a portion of the 12,425 ha Shume-Magamba Forest Reserve, is managed through a genuine state-community partnership. Most of the protection functions (securing the forest from illegal use by bringing it out of open access) fall to Gologolo village, while most of the industrial plantation functions fall to the FBD (tasks of issuing harvesting licenses and determining replanting regimes). Decisions within both areas, as well as a host of subsidiary matters (such as replanting regimes) are fully discussed and confirmed within the monthly meetings of the Joint Management Committee. Like all co-managed arrangements involving the state and communities, rural people’s roles have been fairly tightly linked to the access rights accorded them. This renders the arrangement vulnerable to constant pressure by the community for more and more access because of the commercial plantation estate. Because the government would want to recoup some of its establishment and management costs it has not been forthcoming on the demands. Given the experience and lessons learnt from many such arrangements, it is expected that in future years competent villages could take on the full onus and rights of management, either on a revenue-sharing basis, contract, or even ‘hire-purchase’ type arrangement.


4. The Ufiome Forest Reserve Management Area
This is a management arrangement that establishes communities as forest management authorities in their own right, which is more sophisticated than the Gologolo partnership arrangement, because in the Ufiome case communities have been recognized as ‘Managers’ of respective parts of the 5,635 ha mountainous catchment forest. Each of the eight adjacent communities owns a ‘Village Forest Management Area’ for which it has signed an agreement with the FBD. The FBD has no operational role in management and can only intervene if so requested by the VFMA or only in instances where the VFMA has failed to live up to the expectations of the management plan and its own by-laws.


---

**ZIMBABWE**

**THE CAMPFIRE PROGRAMME**

One of the best-known collaborative programs can be found in Zimbabwe, where the communal areas management program for indigenous resources (CAMPFIRE) is devolving power over management of wildlife and other resources to local people. Its success is attributed to the tangible benefits from wildlife that accrues to the local communities. These benefits generated increased local support that has enabled the program to embrace other communal resources such as grazing, water, and woodlands. Despite the wide acclaim it has achieved, CAMPFIRE has not been without problems. It has to operate within a confusing institutional framework that has undermined traditional and clearly understood structures. An independent assessment found out that the impact on individual household income has fluctuated considerably, and that, on average, it has been low and insufficient to compensate for damage done by wildlife. The assessment also note examples of financial abuse by some individual community leaders and found that very little infrastructure could be attributed to CAMPFIRE – and some of that which has resulted from CAMPFIRE was found to be poorly planned (e.g. silted-up dams). There has undoubtedly been an increase in capacity to plan and implement projects at the community level, but the rapid expansion of CAMPFIRE has meant that training resources have been thinly spread.

GHANA

Context: The ever-decreasing timber resource base in the on- and off-reserve landscape, supply cuts, and difficulties in meeting foreign demand of timber and other wood-based products. Realization by a few timber companies that future supplies of timber can only be guaranteed by engaging in actions to preserve and grow more timber in the off-reserve landscape, including on farmers’ fields. The state’s realization that it cannot, on its own, guarantee sustainable forest management in the off-reserve areas because the state does not hold property right to the land.

1. The Gwira Banso (GB) Project
The GB Project is a forest management and marketing project. The GB Project is being developed on a 16,000 ha off-reserve concession which includes areas of pristine, wet, evergreen forest. However, timber trees, by and large, are on farmers’ land.

Stakeholders:
- Timber Industry: The Primewoods Products Ltd (GAP) and Dalhoff Larsen & Honeman A/S (DLH) of Denmark. GAP’s main challenge is to ensure future timber markets in Europe, in the face of challenging consumer preferences for lighter colored woods and concerns about the environmental sustainability of tropical timber harvesting; and (ii) DLH is concerned with developing and promoting a new range of tropical timber species on the world market, and developing wood products that are seen to be based on a clearly-defined and sustainable environmental policy.
- Chiefs and people of Gwira Banso, whose concern is to produce cash crops and food crops on their land parcels.
- Public sector organizations such as the Forestry Commission, the Ministry of Food & Agriculture, and the Ghana Export Promotion Council, who would like to see sustainable forest management, agricultural production, and trade in quality cocoa, wood products, and NTFPs boosted.

A major concern of the Project is that the expansion of cocoa production threatens the stock of timber trees and other forest goods and services. The Project, therefore, seeks to encourage participation of the farming communities within the concession area in sustainable forest management, as an alternative to the slash-and-burn agriculture which is considered unsustainable. Help with sustainable agriculture was also included, as early consultations made it clear that farmers’ main fears concerned being ejected by the Project from their farms.
The Project has reached agreement with communities on a number of issues. These include:

- No admittance by traditional authorities of new (cocoa) farmers into the concession area;
- Establishment of an institutional/implementation arrangement (Project Steering Committee) that includes the above-mentioned stakeholders and others (including tenant farmers and CARE International that is underwriting some costs). The PSC meets quarterly to review progress and prepare implementation plans. A Project Coordinator coordinates and facilitates implementation of work programs.
- Establishment of tree nurseries for the production of seedlings of native timber species and distribution of free seedlings to farmers for planting on their land (40 trees/ha expected).
- Introduction and cultivation of non-timber forest products that can improve farmers’ income levels. One particular NTFP that is being encouraged is the valuable *Garcinia spp.*, used traditionally for teeth-cleaning all over Ghana, and whose existence is highly threatened because of overexploitation.
- Allowance of the integration of forest trees with agricultural crops on the same piece of land. Working with the Ministry of Food & Agriculture, the Project has established an agricultural extension unit to provide frontline support to beneficiary farmers in black pepper cultivation, new cola varieties, fish farming, snail farming, and mushroom cultivation that can serve as safety net (quick incomes) while farmers wait for trees to mature. Replacing farmers’ lost opportunities helps also to relieve the forests of pressures to convert them into purely agricultural lands through the traditional slash-and-burn. The Ghana Export Promotion Council is promoting mushroom and snail farming in Ghana to meet both domestic and foreign demand.
- Implementation of village-level development activities according to community priorities, funded by a self-imposed levy based on volume of timber harvested. So far, this has supported construction of schools, health posts, and wells for drinking water.

As its activities evolve, the Project will need to develop a more formal conception of rights and obligations of the farmers and of GAP and DLH. It will need also to evolve a marketing structure that gives security to farmers involved in developing new forms of sustainable economic activities. The most important innovation is the attempt to pursue both sustainable forest management and sustainable agriculture and to develop support structures that enable farmers to practice both. In both fields it has entered new areas in which there are no ready off-the-shelf technology package solutions. The Project’ success will be determined by the nature of the interactions it continues to develop with farmers; its ability to collaborate with local authorities, national bodies – notably the Forestry Commission – and research and development agencies in addressing the problems and needs that emerge; and its ability to find approaches that gain the confidence and support of farmers.

*Source: Kotey et al., 1998.*
2. The Swiss Lumber Company Experience

Without any sizeable concession from which to harvest timber for its modern mill at Wassa Amenfie in the Western region, the Swiss Lumber Company has gone into developing its own timber production plantations. To meet its timber demand, the company has additionally developed contracts with neighboring farmers to release land for growing timber. These arrangements include:

- Growing timber on degraded and marginal agricultural lands.
- Growing indigenous timber species rather than fast-growing exotic species. The species recommended and grown include the hardwoods mahogany (Khaya ivorensis), edinam (Entandrophragma angolense), odum (Melicia excelsa), and the fast-growing softwood, wawa (Triplochiton scleroxylon).
- Exploration of the potential of incorporating agricultural crops into the timber plantations in the future.
- Ensuring joint ownership in the timber grown on farmers’ fields, thus assuring that farmers would have an interest in the protection and management of the trees from wildfires and illegal harvesting.
- Provision of four types of payments to participating farmers: (i) a lump-sum down payment; (ii) a percentage share of the timber crop at harvest; (iii) an annual land rent; and (iv) a first option on a weeding contract on the plantations. The percentage share and the down payment vary inversely: the larger the initial down payment, the lower the farmer’s share in the mature timber at harvest. The farmers’ share in the future timber harvested varies from 20 to 50 percent.
- Farmers are bound by their contract to give the Swiss Lumber Company the first option in the purchase of their share of the timber at prevailing market prices.

The SLC model seeks to bring marginalized and degraded lands back into production by planting forest trees on them rather than competing with farmers for the best cultivable lands; it is focused on a medium-term to long-term economic venture; and recognizing that long-term investments and discounting are a problem for farmers, it provides them with short-term investments while assuring that they have long-term interests in the timber they grow.

Source: Kotey et al., 1998.

3. The Oda-Kotoamso Agroforestry Project (OCAP)

Partnership Initiation Date: 1997
Location: Wassa Amenfie district in the Western Region of Ghana
Partners:
- The Public/Community Partner: Oda-Kotoamso Agroforestry Project (OCAP), a community-based agroforestry enterprise. It provided land.
- The Private Partner: Samartex Timber Processing Company provided capital, technology, and a market.
- Other Partners: Deutscher Entwicklungsdiensit – (DED - German Development Service) and Centrum fuer Internationale Migration und Entwicklung (CIM)
provided technical know-how, while the Deutsche Investitions- und Entwicklungsgesellschaft (DEG – a member of the German Kreditanstalt fuer Wiederaufbau) -- supported with capital.

Venture: Agroforestry using indigenous tree species including mahogany (Khaya ivorensis), edinam (Entandophragma angolense), odum (Melicia excelsa), wawa (Triplochiton scleroxylon), and promotion of NTFPs, particularly Thaumatococcus danielli from which thaumatin, a natural sweetener proven to be 1000 times sweeter than cane or beet sugar, has been successfully processed into a high value product.

Performance: OCAP has restored about 450 ha of degraded off-reserve areas. Enhanced environment and biodiversity. Improved living standard of communities from sustained incomes derived from the sale of the sweetener called thaumatin and derived from T. danielli. Contributed in employment creation for the youth. Replication in other areas and on farmers’ farms is happening.

Source: Ghartey, K.K. & Yeboah, D. 2009
In South Africa, a promising alliance is shaping up between the forest industry and a large network of private tree-growers. Industrial forest management is overseen by a regulatory authority, comprised of experts as well as representatives from NGOs, the local community, and government. This authority is responsible for:

- inviting tenders;
- setting guidelines;
- auditing performance; and
- charging penalties for poor performance.

Under this scheme, the South African Pulp and Paper Industry (SAPPI) guarantees 7,600 private tree-growers a market for wood, while also providing training, seedlings and other technical and financial support.

This scheme allows for significant local community and private sector involvement in forest management, thereby offering an alternative to government-controlled forestry models. However, the scheme has only been made possible with the political willingness of the government to support this kind of partnership.


Annex 8: Examples of Projects that are Benefiting from Carbon Payments

(1) Nile Basin Reforestation Project in Uganda

The Nile Basin Reforestation Project in Uganda is a ground-breaking project being implemented by Uganda’s National Forestry Authority (NFA) in association with local community organizations. This is the first CDM-supported forestry project that has been registered in Africa.

The growing trees absorb carbon dioxide from the atmosphere, in exchange for revenues from the World Bank BioCarbon Fund paid to NFA and the communities. The Ugandan project is one of only eight reforestation projects world-wide that have been approved to date, seven of which were registered this year. The Project will generate about 500 jobs during planting and 200 jobs during ongoing management of the forest.

The Project will establish a plantation of pine and mixed native species in the Rwoho Central Forest Reserve, grasslands that were degraded due to deforestation and erosion. This Project is an example of sustainable forest management in a country that currently only has a few thousand hectares left of timber plantations. The expansion of wood resources in Uganda is crucial for the country to meet a growing demand of wood and to reduce the pressure on the remaining native forests in the country. This is the first of five small-scale projects developed through the Clean Development Mechanism (CDM), where each will be registered separately, and the total size of the plantation will ultimately reach 2,137 hectares.

The announcement of this first forestry project in Africa coincided with an important meeting of the UN Framework Convention on Climate Change in Bangkok. This was the penultimate negotiating session before Copenhagen in December 2009, where governments discussed an ambitious international climate change deal. Forest issues were a key part of the talks. Until now, only reforestation and afforestation have been part of the CDM. Negotiators are currently discussing not only the streamlining of CDM rules, which have been a challenge to implement, but also whether it should include more land use activities such as the restoration of wetlands, agriculture, and REDD. If this is achieved, poor rural communities, especially in Africa, will be able to implement more land use and forestry projects and benefit from carbon revenues.

(2) Uchindile-Mapanda Reforestation Project

The Uchindile-Mapanda reforestation project is the first agriculture, forestry, and other land use (AFOLU) Voluntary Carbon Standard (VCS) project in Africa to be validated and registered, providing a guarantee of quality, credibility, and permanence to the use of forestry in the carbon markets. The validation, which was carried out by TÜV Süd enables the project to combine an approved CDM methodology providing technical integrity, with a VCS buffer that addresses the risk of non-permanence and gives an essential guarantee of delivery. This approach means the Project has:
• Created a reserve of 40 percent of the total number of carbon credits available to cover any non-delivery;
• Made ex-post forestry carbon credits available for sales based on confirmed verification, when the independent third party DOE confirms how many tons have actually been sequestered;
• Set aside 39 percent of the project area for the conservation of local wildlife and indigenous species.

In addition, the Project received Forest Stewardship Council (FSC) accreditation in 2008 and expects validation from the Climate Community and Biodiversity Alliance (CCBA) shortly.

The Uchindile-Mapanda reforestation project, which is managed by Green Resources, takes degraded grassland and converts it into sustainably harvested forests, which sequester carbon emissions from the atmosphere and generate carbon credits. The development of a sustainable operation in a community reliant on subsistence farming is said to have given important economic benefits to the local area. Ten percent of the carbon credit revenues are committed to investment in the community including the building of school classrooms, teachers’ houses, dispensaries and roads. Two hundred local people are employed in the forests, and more than 200 km of roads have been built. In addition, woodlots have been created throughout the area for local villagers to run and maintain themselves. The forests of eucalyptus and pine will be sustainably harvested and the wood will go to the local Sao Hill sawmill, also owned by Green Resources, for the manufacture of transmission poles, doors and other wood products.

The Carbon Neutral Company has secured exclusive access to the carbon credits.

(3) Congo Basin Forest Fund Awards to Soil Carbon Initiative

An initiative using soil carbon enrichment techniques to boost agricultural yields, alleviate poverty, and protect endangered forests in Central Africa was selected as one of six projects to win funding under the Congo Basin Forest Fund (CBFF). The scientific committee of the CBFF awarded Belgium’s Biochar Fund and its Congolese partner ADAPEL 300,000 to implement its biochar concept in 10 villages in the Equateur Province of the Democratic Republic of Congo. The approach improves the fertility of soils through the introduction of “biochar” — charcoal produced from the burning of agricultural residues and waste biomass under reduced oxygen conditions — thereby increasing crop yields and reducing the need to clear forest for slash-and-burn agriculture. The Biochar Fund says the scheme will help address lack of access to clean, renewable energy among poor rural communities, while simultaneously cutting emissions from deforestation and forest degradation.

The Biochar Fund says the Project was selected by the CBFF for scoring high on its selection criteria which are: (1) reducing the rate of deforestation in the Congo Basin, (2) alleviating poverty and improving livelihoods of the poorest forest communities, (3) strengthening the capacity of local partners (in this case grassroots farmer organizations in Congo), (4) improving humanity's knowledge of the forest ecosystem and the factors leading to its alteration (in this case the study of tropical soil dynamics and farming systems which put pressures on the forests), and (5) presenting a highly innovative and creative conservation concept. The venture hopes to
eventually capitalize on the emerging market for carbon credits to generate additional income for communities, which rank among the poorest in the world and suffer from chronic food insecurity. The carbon market would provide an incentive to utilize waste biomass and regrowing resources to establish a carbon sink and the means to invest into long-term soil fertility and the recuperation of previously degraded land.

(4) **Ibi Bateke Carbon Sink Plantation (US$ 2 million)**

The Project is promoting the reforestation of 4,220 hectares on the treeless environment of the Bateke Plateau, 150 kilometers from the DRC capital of Kinshasa, to generate a sustainable source of fuelwood and lumber for the city of Kinshasa (10 million inhabitants), while creating a carbon sink capable of sequestering around 2.4 million tons of CO\(_2\) over 30 years (around 1 million tons of CO\(_2\) until 2017). The Project will be implemented in the Ibi estate, village of Mbankana, Maluku municipality. The Project has been designed and will be implemented by NOVACEL (*Nouvelle Société d’Agriculture, Culture et Élevage*), a local private company founded by natives of the Batéké region in 1985.

The reforestation activities with various species of *Acacia* and *Eucalyptus urophylla* will take place within a 6,000 ha plot that has been legally titled by the *Ministère des Affaires Foncières* in the form of a 25-year lease (*bail emphytéotique*) to Olivier Mushiete, general director of NOVACEL. The Mushiete family signed, on January 1, 2008, a long-term lease (30 years renewable, effective since January 1, 2007) with NOVACEL, for the area of the reforestation project. Hence, NOVACEL currently possesses the land use rights of these 4,220 hectares, including the trees and future emission reductions for the duration of the Project.

The Project is using carbon finance to generate resources for health, education, and agroforestry activities while also trapping the estimated 2.4 million tons of carbon dioxide over the next 30 years. On the environmental side, the Project will reduce deforestation of the remaining forest galleries. It will also improve the control of bush fires, which would favor natural regeneration of local forests. Plantations managed in a sustainable way will also provide shelter to wildlife.

The BioCarbon Fund has been pivotal in enabling NOVACEL to obtain loans from private firms to finance the upfront investments of the Project. The BioCarbon Fund has attracted the participation of another carbon buyer, Orbeo, a subsidiary of the French conglomerate Societe Generale and Rhoda, which is buying a similar amount of credits.

On August 4, 2009, the World Bank signed an Emission Reductions Purchase Agreement (ERRA) with NOVACEL. This was the first of its kind in the Democratic Republic of Congo to benefit from the Clean Development Mechanism (CDM), a market-based approach that allows countries which have ratified the Kyoto Protocol to purchase carbon credits across borders, reducing greenhouse gases in the atmosphere to slow global warming. The WB-administered BioCarbon Fund will purchase half a million carbon credits from the initiative to reforest 4,200 hectares of degraded land.

(5) **Humbo Community-assisted Natural Regeneration Project in Ethiopia**
On December 7, 2009 this community based project was registered as the first single largest forestry project in Africa and the first ever Ethiopian based project under the Clean Development Mechanism (CDM) of the Kyoto Protocol. The BioCarbon Fund of the World Bank has negotiated to purchase stock of carbon of 165,000 ERs (between 2009 to 2017) at a price of about US$4.40/ER, assuring the seven (7) participating communities a total amount of US$726,000 (=165,000*US$4.40), which will be transferred from the World Bank to the seven communities through World Vision who has partnered and supported financially and technically since the inception of the project. Further revenue will be available to the communities from the sale of carbon credits not purchased by the World Bank as well as from the sale of timber and non-timber forest products from designated woodlots in the project area.

The overall goal of this project that started implementation since 2007 is the sequestration of carbon in a biodiverse native forest, and the simultaneous reduction of poverty in the Humbo area with support of education, health, and food security financed by carbon funds. Humbo is situated in the southwestern part of Ethiopia. The project will help restore nearly 3,000 hectares of biodiverse natural forest with expected sequestration of an estimated 880,000 tonnes of CO₂e over the next 30 years (338,000 tonnes of CO₂e by 2017) through natural regeneration of species including *Acacia spp.*, *Aningeria adolfifericii*, *Podocarpus facetus*, *Olea africana*, *Cordia africana*, *Croton macrostachytus*, *Erthrina spp.*, *Ficus spp.*, and other locally indigenous species. In addition, the project seeks to (i) pilot community ownership and management of community land within a framework of broad core values (carbon sequestration, biodiversity enhancement, natural resource management, poverty reduction); and (ii) restore the habitat for a range of threatened species including the Ethiopian banana frog, the Ethiopian thicket rat, and the Nechisar nightjar.

The restoration will require a management agreement involving all local stakeholders and benefiting from a robust legal standing. Seven communities are expected to establish community cooperative societies to address these issues. Cooperatives comprising local people, including both men and women, and representing the diversity of land users, representation from the project proponent, World Vision, and the Ethiopian Forestry Department, will establish the legal ownership of the community land and manage it for carbon, biodiversity and income-producing activities to the account of the local population. The project will mainly use the Farmer Managed Natural Regeneration (FMNR) technique, in which existing tree and shrub root material in the soil is identified, selected, pruned, and managed to enable re-growth. This technique has been developed in Niger 20 years ago and is now implemented on over 2 million hectares in Niger, Chad and Burkina Faso.

To date seven (7) community cooperative societies have been established in Humbo. Project implementation is being jointly undertaken by the community cooperative societies, Ethiopian Agricultural, Rural Development & Forestry Development Coordination Office (ARDFCO) and World Vision Ethiopia and Australia (WV-E/A). ARDFCO and WV-E/A will provide technical expertise to assist with the implementation of reforestation activities and commercial recovery of forest products. World Vision Australia is financing the project.
(6) Proposed Green Belt Movement Aberdare Range and Mount Kenya Watersheds
Reforestation Project in Kenya

The Project proposes to reforest 1,876 ha of degraded public land and private land with high
community access in the Aberdare Range and Mount Kenya watersheds, especially denuded,
steep lands in important water catchment areas. The Project will pay local communities who will
be organized into Community Forest Associations (CFAs) and provide them with the technology
and knowledge to reforest these lands and manage the new forest.

The Project is expected to sequester around 100,000 tons CO$_2$e by 2012 and 380,000 tons CO$_2$e
by 2017. The World Bank-administered BioCarbon fund will purchase the carbon credits.
Reforestation will bring important environment benefits by reducing the erosion process,
protecting the water sources, and regulating water flows. Biodiversity will also benefit from the
re-introduction of a wide range of natural floral species. On the socio-economic side, local
farmers will enjoy a direct improvement of their income through the payments for environmental
services. Indirect social benefits will also come from the forest products and improved social
organization and capacities. The plantation method will allow for integration of the various
farmers activities to reduce potential leakage.

The proposed Project will be implemented by the Green Belt Movement and local populations.
Bibliography


Norwegian Forestry Group. 2006. The Southern Sudan Forest Sector Program. Project proposal developed by the Norwegian Forestry Group for Ministry of Foreign Affairs, Norway.


Owino, F. and A. Ndinga. 2004. Study on Forest Administration and Related Institutional Arrangements. KSLA, AFORNET and FAO.


World Conservation Union (IUCN), Eastern Africa Programme.


