TRENDS IN FOREST OWNERSHIP, FOREST RESOURCE TENURE AND INSTITUTIONAL ARRANGEMENTS

CASE STUDY FROM GHANA

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Summary

At the beginning of the twentieth century, the forest area of Ghana covered about 34 percent of the total land area. Forest reservation was started in 1927 by the colonial administration and ensured the reservation of 11 percent of the country’s total land area. In all, 282 forest reserves and 15 wildlife protected areas, occupying more than 38 000 km² or about 16 percent of the total land area, were established and gazetted in Ghana. There was an additional 4 000 km² of forest outside this gazetted area. The main aim of the reservation programme was to ensure the protection of substantial areas of forest, but the process of forest land reservation ignored the traditional tenure system, which led to a negative attitude to reserves among the population, especially in forest fringe communities. This situation was aggravated by a failure to inform forest communities of their usufruct rights and by the focusing of forest management on forest protection by the central government.

All forest lands in Ghana are held in trust by the government, which manages them for the stool landowners. The Forest and Wildlife Policy of 1948 stipulated that the government manage forest resources single-handedly, without the collaboration of forest fringe communities, and did not yield many positive results. Passage of the current Forest and Wildlife Policy of 1994 led to some progress regarding stakeholder collaboration, but did not solve the ownership issue regarding trees outside forest reserves and on farmland; the lack of clear ownership status calls for a policy review. The policy of 1948 was driven by the need for commercial timber production, mainly for export. The 1994 policy, on the other hand, aims at the conservation and sustainable development of the nation’s forest and wildlife resources for the maintenance of environmental quality and a steady flow of optimum benefits to all segments of society. The forest sector’s potential to contribute to sustainable forest management (SFM) and poverty reduction for socio-economic development faces challenges related to forest ownership, resource tenure and the lack of effective participation from resource owners and local communities in forest management decision-making. This lack of participation is due to inadequate incentive structures to ensure SFM.

Institutional arrangements have been established to address the complex problems associated with forest ownership, resource tenure and their collective impacts on SFM and poverty reduction. These arrangements include increased off-reserve annual allowable cuts, competitive bidding for timber rights, increased stumpage fees for timber, sharing of natural forest timber revenues, and improved incentives for SFM, such as social responsibility agreements (SRAs), incentives for forest plantation development, and policy reforms for benefit sharing in the modified Taungya system (MTS) and commercial forest plantations. Forest ownership and resource tenure will not be able to address SFM, socio-economic development and poverty reduction until the legislation that governs land and tree tenure and farmers’ tree rights has been amended.

In Ghana, forest ownership is derived from the system of land inheritance. There are two forms of inheritance: the patrilineal system and the matrilineal system. As a result of the different historical settings of these two systems, they have different concepts of land, land acquisition and landownership. Under the patrilineal system, inheritance passes directly down the male line, while in the matrilineal system succession to property and land passes along the matrilineal line according to primogeniture in the following order: brothers, sisters’ sons, sisters, and sisters’ daughters (Agyeman Dua, 1991). These systems of land inheritance do not necessarily include tree tenure rights, so SFM is difficult to establish in Ghana. Reform of tenure systems would help to ensure the long-term growth of not only sustainable forestry development but also the national economy as a whole. In addition, since the 1994 Forest and Wildlife Policy came into force, there has been no legislation regarding off-reserve management and the recognition of rights to naturally occurring timber. The way forward is to examine how forestry can alleviate poverty through off-reserve forest ownership. There is a need for greater equity through collaborative management, to reform the forestry sector and enforce compliance with participatory approaches to forest management.
The ownership of trees outside forest reserves requires particular consideration in the next policy review and amendments to the legislation governing land, tree tenure and farmers’ rights. Legislative initiatives since 1994 have concentrated on promoting and regulating timber operations, while overlooking benefit sharing and collaborative management issues. A law that supports these is urgently required. It is recommended that legal provisions be made to protect tree farmers from unlawful expropriation by local communities.
**Acronyms**

<table>
<thead>
<tr>
<th>Acronym</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>CFC</td>
<td>collaborative forest committee</td>
</tr>
<tr>
<td>DFID</td>
<td>Department for International Development</td>
</tr>
<tr>
<td>EU</td>
<td>European Union</td>
</tr>
<tr>
<td>FSD</td>
<td>Forest Services Division</td>
</tr>
<tr>
<td>HFBCA</td>
<td>High Forest Biodiversity Conservation Areas (Project)</td>
</tr>
<tr>
<td>HFZ</td>
<td>high forest zone</td>
</tr>
<tr>
<td>MOP</td>
<td>manual of procedures</td>
</tr>
<tr>
<td>MRI</td>
<td>Multi-Resource Inventory</td>
</tr>
<tr>
<td>MTS</td>
<td>modified Taungya system</td>
</tr>
<tr>
<td>NFPDP</td>
<td>National Forest Plantation Development Programme</td>
</tr>
<tr>
<td>NGO</td>
<td>non-governmental organization</td>
</tr>
<tr>
<td>NSZ</td>
<td>northern savannah zone</td>
</tr>
<tr>
<td>NWFP</td>
<td>non-wood forest product</td>
</tr>
<tr>
<td>SFM</td>
<td>sustainable forest management</td>
</tr>
<tr>
<td>SRA</td>
<td>social responsibility agreement</td>
</tr>
<tr>
<td>TUC</td>
<td>timber utilization contract</td>
</tr>
<tr>
<td>TUP</td>
<td>timber utilization permit</td>
</tr>
<tr>
<td>VLTP</td>
<td>Validation of Legal Timber Programme</td>
</tr>
</tbody>
</table>
Introduction

RESEARCH OBJECTIVES
This study was prepared for the FAO Regional Workshop on Trends in Forest Ownership, Forest Resource Tenure and Institutional Arrangements in Africa, held in Nakuru, Kenya from 19 to 21 October 2006.

The study investigates the trends in forest resource ownership and the institutional arrangements currently operating in Ghana. Its ultimate objective is to improve forest management practices and forests’ effect on poverty alleviation, through the formulation of strategic policies and laws that link resource ownership, management agreements and institutional arrangements. The study was designed with the overall aims of:

- identifying and evaluating existing indigenous forest ownership, forest tenure systems and institutional arrangements;
- examining the impact and relevance of these for poverty alleviation;
- assisting the formulation of policies and laws to develop national forestry through linking resource ownership, management agreements and institutional arrangements for effective poverty reduction.

More specifically, the study:

- focuses on the northern savannah zone (NSZ) and the high forest zone (HFZ) of Ghana;
- assesses conflicts over resource ownership, management agreements and institutional arrangements in rural communities in Ghana, and the effects these have on poverty alleviation;
- identifies problems that hamper the optimization and implementation of strategic policy formulation and law development.

Research methodologies included drawing up a matrix of forest tenure categories, management agreements and institutional arrangements in Ghana; conducting open-ended interviews; and assessing primary data through questionnaires for stakeholders, organizations and partners.
The formal and legal context

THE TENURE SYSTEM
In general, there are greater tree tenure restrictions in the three northern regions of Ghana than in southern parts. Immigrant and tenant farmers have fewer rights to plant, use and own trees than indigenous farmers, mainly because of land inheritance systems.

Forest area, types and condition
Ghana is richly endowed with renewable natural resources, which have played vital roles in its socio-economic development before and since independence in March 1957. In 1906, the colonial administration enacted legislation to control the felling of commercial tree species; in 1908, the Forestry Department was established; demarcation and reservation of the forest estate took place between 1928 and 1939; and the Forest Policy of 1948 was developed as a guiding instrument for the management of forests.

The 1948 policy established 282 forest reserves and 15 wildlife protected areas, which occupied more than 38 000 km², or about 16 percent of the country’s total land area. An addition 4 000 km² of forest existed outside this gazetted area. Since then, 50 000 ha of plantations have been planted in forest reserves, and additional plantations have been established by individuals, institutions and communities. On- and off-reserve plantation establishment increased when the Forestry Department started its Collaborative Community Forest Plantations Project, and has accelerated since the launching of the National Forest Plantation Development Programme (NFPDP) in 2001 and the Presidential Special Initiative on Forest Plantations in 2002, through the Highly Indebted Poor Countries Initiative. It is difficult to assess the expansion of teak plantations outside forest reserves, however, because the Forest Services Division (FSD) has kept only scanty records over the years.

FSD’s target is to establish 20 000 ha of plantation a year on reserve forest. An estimated total of 60 000 ha has been planted since 2005, using the modified Taungya system (MTS) (NFPDP Annual Report, 2005).

Table 1. Forest reserves in HFZ

<table>
<thead>
<tr>
<th>Forest type</th>
<th>Area (ha)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Production area</td>
<td>719 300</td>
</tr>
<tr>
<td>Convalescence area</td>
<td>240 392</td>
</tr>
<tr>
<td>Protected area</td>
<td>238 200</td>
</tr>
<tr>
<td>Other</td>
<td>415 108</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>1 613 000</strong></td>
</tr>
</tbody>
</table>

Table 1, showing the status of forest reserves in HFZ, is based on results of the Multi-Resource Inventory (MRI) of 2001/2002, which studied a timber production area of 719 300 ha. MRI was a forestry inventory programme supported by the World Bank and the United Kingdom’s Department for International Development (DFID) with the primary objective of estimating the stocking levels of timber resources in the permanent forest estate of HFZ – Brong Ahafo, Ashanti, Eastern, Central and Western regions. The inventory aimed to provide estimates at the reserve, district, regional, ecological zone and national levels. In accordance with wider perspectives of the value of forests, an assessment of important non-wood forest products (NWFPs) and an indication of fauna populations were included in the survey.

HFZ contains the permanent forest reserves within the middle belt and the southern forest, and includes five of the country’s ten regions, as shown in Table 2. NSZ comprises the three northern regions, and the Coastal Savannah Zone covers the Greater Accra region and parts of Central and Southern Volta regions; these zones are non-timber producing. NSZ contains areas of communal forest, and the coastal savannah zone is characterized by individual, group and community woodlots to meet domestic and fuelwood requirements.
As shown in Annexes 1 and 2, there are forest reserves in Northern, Upper West and Upper East regions, but these do not produce timber, although some have established plantations and are undergoing reforestation under NFPDP. Some of these reserves protect the water sources and catchments of major rivers flowing into Volta lake, including headwaters of the Kulpawn and Dhaka and tributaries of the Tapania, Kulpawn and Nasia.

Table 2. Trends in reserve and timber production areas in HFZ, by region

<table>
<thead>
<tr>
<th>Region</th>
<th>Reserve (ha)</th>
<th>Production forest in 1989 (ha)</th>
<th>Production forest since 2002, (ha)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ashanti</td>
<td>383 900</td>
<td>234 500</td>
<td>126 400</td>
</tr>
<tr>
<td>Brong</td>
<td>264 060</td>
<td>202 400</td>
<td>126 300</td>
</tr>
<tr>
<td>Central</td>
<td>110 730</td>
<td>122 800</td>
<td>73 400</td>
</tr>
<tr>
<td>Eastern</td>
<td>153 750</td>
<td>87 900</td>
<td>70 200</td>
</tr>
<tr>
<td>Western</td>
<td>700 880</td>
<td>513 400</td>
<td>323 000</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>1 613 240</strong></td>
<td><strong>1 161 000</strong></td>
<td><strong>719 300</strong></td>
</tr>
</tbody>
</table>

The following are the reasons for the declines in production forest area since 1989:

- In Brong, Ashanti and Eastern regions, most convalescence areas did not recover and tended to degrade, mainly as a result of annual wildfires.
- In Western and Central regions some areas are not degraded, but have been designated as protection forest, for example biodiversity areas.
- Other reserves, such as Manzan, Muro and Sukusuku, have been encroached by settler cocoa farmers.

Table 3. Off-reserve TUCs

<table>
<thead>
<tr>
<th>Region</th>
<th>Number of TUCs</th>
<th>Area (ha)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ashanti</td>
<td>16</td>
<td>80 501</td>
</tr>
<tr>
<td>Brong</td>
<td>26</td>
<td>105 567</td>
</tr>
<tr>
<td>Central</td>
<td>16</td>
<td>64 309</td>
</tr>
<tr>
<td>Eastern</td>
<td>6</td>
<td>88 225</td>
</tr>
<tr>
<td>Western</td>
<td>3</td>
<td>26 517</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>67</strong></td>
<td><strong>315 119</strong></td>
</tr>
</tbody>
</table>

Timber utilization contracts (TUCs) are the legal instruments governing forest management and product use. The Timber Resources Management Act of 1997 states that no person shall harvest timber from any land to which the act applies unless he/she holds timber rights in the form of a TUC in respect of the land area concerned. TUCs are applicable both on- and off-reserve. Table 3 indicates the designated areas outside forest reserves for which rights of exploitation are guaranteed because they contain timber trees. Five-year timber utilization permits (TUPs) can be applied to relatively small land areas outside these designated areas.

**STAKEHOLDERS**

Stakeholders in the forest estate, both on- and off-reserve, include the central government through its Ministry of Lands, Forestry and Mines, the Forestry Commission, stool landowners, district assemblies, forest fringe communities, non-governmental organizations (NGOs), timber contractors, administrators of stool lands, and private plantation developers, both local and international. It is important to emphasize that in Ghana ownership of land does not necessarily imply the ownership of and right to fell, extract and convert logs into
lumber without permission from FSD. It is an offence to fell timber, convert it into lumber or convey it without the relevant permission stipulated by law.

Regarding stakeholders’ rights and responsibilities, only the government – through its various ministries, department and agencies – has asserted its rights and responsibilities. This is mainly the result of the government’s failure to formulate policy and define roles for ensuring sustainable forest resource use, and of inequitable benefit sharing arrangements. The relevant policy is ambiguous, and players in the timber industry strongly resist policies and management arrangements that are not in their own interests.

**OWNERSHIP RIGHTS AND RESPONSIBILITIES**
The forests of Ghana are classified as forest reserves, off-reserve forests, communal forests, community plantations, private/individual plantations and institutional plantations.

**Forest reserves**
Forest reserves are fully vested in the State through the Forest Ordinance of 1927, and all forest and timber resources are held in trust by the government on behalf of the stool landowners. Although landownership did not change at the time of reservation, traditional owners are denied rights of access to trees or land in reserves unless they have a permit from FSD. Since its outset, this law has created animosity between local communities and FSD, because of foregone benefits and the view that reserves were created without consultation. The management of trees within forest reserves, and the rights to own, plant, use and dispose of them are controlled by the State through the Forest Protection Decree of 1974.

According to Asare (2000) ownership of forest is closely linked to the indigenous system of landownership. Land is communally owned and held in trust on behalf of the people through the stools and skins. Landowners exert substantial control in deciding whether an area should be set aside for reservation. Although national law grants the government the authority to constitute a reserve on any land it deems appropriate, landowners must be consulted through an arbitration process that is under the jurisdiction of a reserve settlement commissioner, who must take landowners’ concerns into consideration. Some proposed reserves have had to be abandoned because of strong opposition from landowners. Asare also reports that in some instances, such as wildlife reserves, the government purchases the land outright from the landowners, thereby becoming the property owner and enjoying the same rights as any other landowner. In effect landowners – whether stools, skins, the government or individuals – wield immense power on the setting aside of an area as permanent forest estate, and always have rights to revenue from the exploitation of the resource.

**Communal forests**
Communal forests are woodlands outside forest reserves; most of them are in northern Ghana (see Annexes 1 and 2). Unlike the off-reserve forests of the south, which have economically exploitable timber trees, the trees in communal forests can be used only by households as sources of fruits, other food, medicines, etc. Communal forests are either natural or established by communities with support form FSD and NGOs. Trees in these forests cannot be owned or inherited by individuals, but usufruct rights – such as collection of herbs and fuelwood – can be, according to the relevant rules and regulations. In Upper West region for instance, some communities have reserved areas of land for fuelwood production.

**Sacred groves**
Sacred groves are forests that communities have reserved on communal land. They occur throughout Ghana and are usually very small in size. No individual has the right to plant, use or inherit trees and other tree products in most of these traditional forest groves, which are of great socio-cultural and religious significance. The rich histories of these natural enclaves are diverse, but most are related to the beliefs and values of local people. Traditional authorities
employ indigenous strategies to exclude human activities from sacred groves, retaining them in or near their original natural state. The most common of these strategies are taboos that restrict people’s entry altogether or on particular days. Sacred groves therefore present a mosaic of undisturbed habitats for flora and fauna within degraded ecosystems. In some cases, the community’s fetish priest is the caretaker of its sacred groves and is usually granted limited rights to sell tree products, but not the land; no individual has the right to dispose of such land. A case study of sacred groves in Ashanti region, carried out by the Ashanti Regional Office of Ghana’s Environmental Protection Agency in 2005, found that more than 90 percent of the 32 towns visited had at least one sacred grove. The groves average about 1 acre (0.4 ha) in area, with the largest – at Kobi in Moseaso – being about 100 acres. It was also observed, however, that most sites had not been mapped, so it is difficult to measure their sizes; the figures that people quoted were more guesses than actual.

The Taungya system
Taungya is a system of forest plantation in which small-scale farmers are allowed to cultivate crops between the seedlings of a forest plantation for the first few years after planting (Amanor, 1996). The system was introduced in 1928 to restore Ghana’s forest cover, solve the land shortage problems for farmers living near forest reserves, and provide the Forestry Department with labour for plantation development. Since then, lack of ownership rights to trees planted on reserved land have proved to be a great disincentive for sustainable forest management (SFM), and the Taungya system has been modified. The MTS includes benefit sharing and recognizes farmers’ tenure rights. It is expected to promote SFM and poverty reduction approaches in Ghana. The MTS puts into action the 1994 Forest and Wildlife Policy’s concept of granting individual farmers and tree growers the right to plant and inherit trees in forest reserves.

<table>
<thead>
<tr>
<th>Table 4. Features of the different tenure types</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Type of tenure</strong></td>
</tr>
<tr>
<td>Forest reserves</td>
</tr>
<tr>
<td>Off-reserve forests</td>
</tr>
<tr>
<td>Communal forests</td>
</tr>
<tr>
<td>Sacred groves</td>
</tr>
<tr>
<td>Community plantations</td>
</tr>
<tr>
<td>Private plantations</td>
</tr>
<tr>
<td>Industrial plantations</td>
</tr>
<tr>
<td>Taungya system</td>
</tr>
<tr>
<td>MTS</td>
</tr>
<tr>
<td>Collaborative forest management</td>
</tr>
<tr>
<td>11. Commercial plantations</td>
</tr>
</tbody>
</table>
A stool land is land communally owned by the subjects of the stool and held in trust by a chief who is the unifying symbol of authority.

**MANAGEMENT AGREEMENTS: RIGHTS AND RESPONSIBILITIES**
Management agreements for forestry in Ghana include the benefit sharing agreements used for management of both on- and off-reserve forest resources and social responsibility agreements (SRAs). According to the rules for exploitation of timber products as directed by the *Logging manual*, FSD should measure timber trees within 48 hours of felling so that the District Forestry Office can calculate the stumpage fees to be paid by timber operators. Fees are paid to FSD (which is part of the Forestry Commission), with the shares due to stool landowners, the district assembly (local government) and the office of the administrator of stool lands paid through the administrator of stool lands according to the formulae described in the following paragraphs.

**On-reserve:** FSD receives 60 percent of the total stumpage and rent collected; the office of the administrator of stool lands receives 10 percent; and the remaining 30 percent is divided as follows:

- 55 percent to the district assembly;
- 20 percent to the traditional council;
- 25 percent to the stool landowner.

**Off-reserve:** FSD receives 40 percent of the total stumpage collected. The stool landowner receives the remaining 60 percent of the stumpage and 100 percent of the rent.

Until June 2002, when the government adopted the current policy, the benefit sharing arrangements for off-reserve forests were similar to those for reserves. In addition, SRA revenue is paid to the fringe communities for both on- and off-reserve exploitation. In spite of these management arrangements, however, the forest sector has failed to fulfil the expectations of stakeholders and fringe communities, which have been marginalized over the years. Forest exploitation is characterized by unsustainable rates of logging, growing poverty in forest fringe communities, and poor returns to local people and resource owners, mostly resulting from high levels of illegal felling, illegal chainsawing, pervasive corruption in the public sector and weak enforcement of rules. Other significant problems are the inability of FSD to collect outstanding payments and the indebtedness of timber operators. According to the environmental advocacy group Forest Watch Ghana, the country loses US$100 million a year from uncollected timber right fees (announcement in the *Daily Graphic*, 8 October 2004).

According to Opoku (2005), the 2002 revision of off-reserve royalty rates has had very poor results. He states that the formula for distributing royalties from stool land was set out in the constitution, so by seeking to determine royalty rates administratively, the government is violating the constitution. He also comments that the Forestry Commission’s collection of stumpage has been so poor that the benefits of the policy have been nullified.

**PLANNING AND MONITORING OF ON- AND OFF-RESERVE PRODUCTION**
FSD employs manuals of procedures (MOPs) and management plans to manage the country’s forest estate. MOPs lay down strategic, operational and tactical procedures for the effective and efficient management of forest resources in both on- and off-reserve areas. Off-reserve exploitation is covered by the same procedures and rules as on-reserve exploitation. Thus, the procedures apply to the 1.613,000 ha of forest reserves in HFZ, the off-reserve TUC area of 315,119 ha and the area under TUPs. The manuals are: MOP A – Strategic Planning; MOP B – Operational Planning; MOP C – Sustainable Timber Production On-Reserve; MOP D – Stock Survey and Yield Allocation; MOP E – Preparation of Timber Harvesting Schedules for Forest Reserves; MOP F – Controlled Timber Production Off-Reserve; and MOP G –
Wildfire Management. In addition, there are operational guidelines on log measurement, conveyance certificates and forest reserve management plans.

All these manuals provide clear planning and monitoring guidelines, which include participation from owners and managers and seek to ensure SFM and poverty reduction. The manuals provide staff with a basis for preparing management plans and ensuring that timber production areas are managed in accordance with the regulations for TUCs, as defined in the Timber Resources Management Act.

Forest reserve management plans are binding agreements between FSD and the resource owners regarding how the reserve is to be managed. They contain action plans, and emphasize that the overall aim and primary objective of managing forest resources is SFM and poverty reduction.

There is a lack of planning and monitoring systems for other types of forest land, such as communal and private. These types of forest are the source of very insignificant percentages of timber and other forest produce.
Changes and trends

Ghana’s regulations for forest reserve management establish the usufruct rights of forest fringe communities to hunt, fish, collect fuelwood, snails and medicinal plants, and farm. The MTS includes benefit sharing arrangements that recognize farmers’ tenure rights.

According to Kassanga (1998), the term “land tenure” applies to the various laws, rules and obligations governing the holding and/or ownership of rights and interests in land. In Ghana, there are two forms of inheritance: the patrilinial and the matrilinial system. Under the patrilinial system, inheritance passes directly down the male line, with the heir’s paternal uncle assuming temporary custody in cases where the heir is underage. In the matrilinial system succession to property and land passes along the matrilinial line according to primogeniture in the following order: brothers, sisters’ sons, sisters, and sisters’ daughters (Agyeman, 1991). It is important to note that these two main inheritance systems have different concepts of land, land acquisition and ownership rights. In both systems, however, immigrant and tenant farmers have restricted rights to use their farms for food crops, but not tree or cash crops. By discouraging tree planting in this way, the inheritance systems also discourage SFM and poverty reduction.

The system of ownership in forest reserves, which are held in trust for the stool landowners by the government, makes sustainable forest development and poverty reduction easier to pursue, as demonstrated by the MTS. The 1994 Forest and Wildlife Policy encourages increased public (including farmers’ and communities’) awareness of and involvement in the establishment, management and utilization of forest resources, and the MTS is an important way of involving rural people in tree planting. The MTS is based on the original Taungya system, which was revised to include self-financing and sustainability issues during a consultation process from July 2001 to December 2002. The process was initiated by the Government of Ghana with support from FAO and the World Bank. Consultations involved stakeholder groups, including farmers, landowners, local communities and NGOs. Under the MTS, farmers are the owners of forest plantation products, and the Forestry Commission, landowners and forest-adjacent communities are shareholders. Under the original Taungya system, the Forestry Commission was the owner of plantations, and landowners – but not tenant farmers – received benefits from tree crops. The new MTS uses the following benefit sharing framework:

- farmers receive 40 percent of tree outputs;
- the Forestry Commission receives 40 percent;
- landowners receive 15 percent: tribal landowners 8 percent, and traditional authorities 7 percent;
- forest-adjacent communities receive 5 percent.

Currently, the MTS is part of the government’s strategies to alleviate poverty and reclaim lost forest cover. Since 2002, an estimated 60 000 ha of land in degraded forest reserves has been planted.

Since the Forest and Wildlife Policy of 1994, legislative initiatives have concentrated on promoting and regulating timber operations, and have not included benefit sharing or collaborative resource management issues. Greater transparency and competitiveness in the allocation of timber rights are expected to result in higher flows of benefits to landowners, thereby greatly improving the economic value of timber rights for landowners and increasing the indirect benefits for other stakeholders such as farmers. Following the passage of the Timber Resources Management Act in March 1998, the first competitive bids for timber concessions were made in November 2003; since then, the Forestry Commission has accepted bids on only two other occasions. The Forest Plantation Development Fund Act of 2000 provides some hope for improved forest tenure by empowering its board to confer ownership rights on plantation developers, according to guidelines.
FOREST TENURE POLICY

The Ghana Forest Policy of 1948 aimed to create permanent forest through reservation by either the central government or traditional authorities. Its ultimate objective was to ensure sustained and adequate supplies of forest produce to meet actual and potential local requirements and the demands of the export trade, while providing indirect benefits, such as protection of watershed climate and prevention of erosion. It decreed that utilization should be progressive, with no replacement of forest resources not permanently dedicated to forestry, and controlled so that resources lasted as long as the market demanded and until the forest reserve had been regenerated. Forest supplies were also to be used to their utmost prior to land distribution to farming.

The Forest and Wildlife Policy of 1994 introduced a new set of principles for SFM and established priorities for development of the forest sector. This policy therefore contributed to the development of a national forest estate and a timber industry that provide the full range of benefits to society in a manner that is ecologically sustainable, while conserving Ghana’s environmental and cultural heritage. The new policy promotes public participation in the sharing of forest management benefits and responsibilities, and encourages integrated and coordinated research in forest-related issues. It also provides for the conservation of all valuable wildlife habitats and communities.

The constitution of 1992 implies that improved forest management practices would be adopted. It provides that all stool lands in Ghana should be regulated and controlled by the appropriate stool on behalf of the stool’s members and according to customary laws and usage (Article 267). The constitution does not mention clan, family or individual land. It is clear that the legal framework for both on- and off-reserve forest management is the best option for forest management tenure, especially since the 1994 Forest and Wildlife Policy.

Prior to the 1994 policy, forest management was highly geared towards sustainable utilization, with very little collaboration with forest fringe communities. Since the policy, however, rural populations have been increasingly integrated into forest management processes. A key attribute of this form of forest management is the series of laws that apply to rural communities’ landownership and land-use rights, management and harvesting of trees and forest, and benefit sharing. All trees and forest are vested in the president; in other words, they are held by the State in trust for the communities concerned. Although this implies that communities’ legal ownership is not affected, in practice the State has control over trees and forest resources, even though communities and landowners are involved in forest management tasks.

Previous law did not distinguish between ownership of planted and of naturally growing trees, because it assumed that no timber trees were planted. The new law on plantation development and management recognizes the rights of tree farmers and planters.

There is no law that regulates the gathering of living or dead NWFPs. The hunting of a few animal species is restricted by the Wildlife Conservation Regulations of 1971, which also state that animals should not be hunted between August and December or when they are young. Certain methods of hunting are prohibited without written authorization from the Forestry Commission. Restricted hunting methods include the use of gin traps, artificial light or flame, nets (except for fish or poisonous snakes), pitfalls, and poison or poisoned weapons. The law also decrees that only licence-holders can trade in bushmeat.
Analysis of forest management and tenure systems

FOREST MANAGEMENT
Ongoing forest management initiatives for both stool landowners and private, community and individual landowners aim to rationalize forest tenure to promote community participation and equitable benefit distribution. Recently, stool landowners and forest resource managers have been discussing their respective shares in the benefits from on-reserve management, following revision of the stumpage allocation for off-reserve lands. The stool landowners want to be more involved in forest resource management; they would like to take over the entire management process, but this is viewed as being unrealistic.

Collaborative forest management in Ghana involves a working partnership between the local people and FSD to ensure that all forest resources are managed effectively, efficiently and equitably. To ensure that reserve management is equitable, management plans identify the benefits that local people have a right to receive from the management of their resources. Many communities living close to reserves also participate in decision-making for the management of production and protection zones on reserves. Communities may be able to collaborate in the establishment of plantations in conversion zones, rehabilitation through enrichment planting in convalescence zones, establishment of firebreaks, cultivation of NWFPs, boundary maintenance and research programmes. The potential for collaboration should be explored during socio-economic surveys. At a later stage, agreements to guide the implementation of collaborative management programmes can be drawn up, specifying the objectives, activities, resources, roles and responsibilities.

Regarding benefit sharing in plantations established under the MTS, the Minister of Lands and Forestry assured a focus group discussion with Tropenbos International-Ghana in October 2004 that the Attorney General’s department had completed a legal framework on benefit sharing among landowners, forest fringe communities, the Forestry Commission as a service provider, commercial tree plantation developers and Taungya tree growers. He also disclosed that this would provide the framework for communities to obtain access to land in degraded forest reserves. Analysis of the various forms of tenure category indicates that participatory management approaches that are equitable are the most advantageous of existing tenure systems.

LIVELIHOODS
Ghana’s forest estate – both protected and off-reserve – provides both direct and indirect livelihood benefits to the entire population. Off-reserve forest provides 70 percent of the country’s fuelwood consumption.

Rural fringe communities have benefits such as permits to harvest NWFPs from the permanent forest estate. FAO defines NWFPs as “forest products consisting of goods of biological origin other than wood, derived from forests, other wooded land and trees outside forests”. NWFP activities in Ghana include palm-wine tapping, collection of raffia palm and canes, hunting permits, and collection of chew-sticks (Nsokor tree). Usufruct rights, such as for the collection of herbs and medicinal plants, are also guaranteed. With the rural–urban drift, the urban demand for these items has increased, as has collection of NWFPs. Over the years, many people in Ghana have depended on NWFPs for food, medicines, building materials, household goods, agricultural equipment and energy supplies, and NWFPs provide livelihoods for the inhabitants around forest estates. Although access and rights to these benefits are secure, the Forestry Commission has failed to manage them effectively. NWFPs have been marginalized in protection; apart from chew-sticks, no NWFPs are included in permanent protection areas. NWFP exploitation has therefore become an extensive,
commercial trade between rural forests and urban markets, which is often uncontrolled and destructive to the sustainable management of the forest.

According to Agyeman (1993), forest reservation appears to have had little effect on the socio-economic conditions of communities living near reserves; there is no difference in income between areas near to and distant from reserves in either the patrilineal or the matrilineal inheritance systems. One of the main livelihood interventions to result from the 1994 Forest and Wildlife Policy was the introduction of collaborative boundary maintenance. Under this scheme, FSD contracted rural forest fringe communities to clean the forest boundaries for a fee. It was expected that the rising incidence of illegal encroachment would be reduced by providing direct financial benefits to participating contract cleaners, but although successful in some areas the scheme had problems related to long delays in payment and has had to be suspended.

The Forestry Commission is pursuing other management interventions and projects for livelihood sustenance with community involvement. Some of these involve creating alternative livelihoods through beekeeping, snail rearing, grass rearing and micro-credit funds for the improvement of subsistence farming activities. The pressure of population increase in forest fringe communities – through both legal and illegal entry – is expected to diminish, ensuring a positive trend in the sustainable management of forests and helping to alleviate poverty. Projects such as the High Forest Biodiversity Conservation Areas (HFBCA) Project have gone further in this direction by creating community investment funds to ensure continuous development and improvement of the livelihoods of forest fringe communities. This project has received US$2.5 million, and seeks the collaboration of forest fringe communities through community-based advisory groups for the management, protection and conservation of Ghana’s forest reserves.

Other livelihood options identified in forest reserve management plans include ecotourism with community participation to ensure ownership, the free flow of benefits to communities, and employment creation for people involved in implementing activities. This concept could be extended to the seven national parks, six resource reserves, four wildland sanctuaries, five coastal Ramsar sites and the nature reserve.

An important source of livelihoods in both in- and off-reserve forests is illegal chainsawing, particularly among the unemployed youth around the reserves, who view it as their only means of survival. This problem raises sensitive issues on benefit sharing, as illegal chainsawers are aware of the high profit margins of timber contractors and the perceived high life styles of some top forestry officials. Recently, some reserves have been inundated with high levels of illegal mining. These two activities have had very severe negative effects on sustainable management of the forest estate. Collaborative forest management, public education and legal enforcement are the best options for solving these problems.

The MTS, which is currently being used in national reforestation projects in forest reserves, provides the population with some economic benefits and livelihood sources. The immediate benefits of the MTS include:

- reclaiming degraded forest cover;
- sustaining the future requirements of wood industries;
- ameliorating food shortages;
- reducing land scarcity;
- reducing poverty, as farmers are paid for services such as planting and tending;
- generating revenue for the country and stakeholders.

<table>
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<th>Table 5. Impacts of the MTS</th>
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<td><strong>Impacts on natural resource base</strong></td>
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Impacts on livelihoods
More than 36,000 jobs created annually for the minimum achieved planting target of 10,000 ha. Forest fringe community members have stopped migrating to urban centres in search of work. 120,000 tonnes of food produced annually from a minimum achieved planting target of 10,000 ha: maize, 19,000 tonnes in 2005; and plantain 740,000 tonnes from 2002 to 2005. Improved economic well-being of plantation farmers through payments for clearing, peg-cutting, planting, maintenance, etc.

Other impacts
Participation does not discriminate against women and is gender-sensitive, so women and men have equal opportunities to improve their financial status.

General success factors
Forest fringe communities have greater dialogue with FSD through collaborative forest committees (CFCs), which play key facilitating and organizing roles.

Remaining issues to be resolved
Improving/maximizing the benefits from plantation stands through secondary livelihood activities such as beekeeping.
Improved management of existing plantations.

The Forestry Commission’s ongoing Wildfire Fire Management Project involves communities in the establishment of green firebreaks and is based on MTS concepts. Species are selected in consultation with communities, to ensure that tree management through thinning and pollarding will meet their future fuelwood requirements and generate other benefits such as household income from the sale of fuelwood.

WOMEN AND LAND TENURE
No customary law distinguishes between men and women in terms of rights to own and use land or trees; although women’s rights to inherit land are weak and insecure, once they have acquired land their use of it is not restricted.

In patrilineal societies, women inherit far smaller shares of their fathers’ land than their male siblings do. Current land scarcities are leading sons and family heads to assert male claims and lineage principles more strongly (Nukunya, 1972).

Matrilineal societies recognize greater rights and inheritance claims for women, who have the same rights as men to own and plant trees on private land, but not on communal land. The restriction on planting and owning trees on communal land also applies to immigrants and tenants. In rural and semi-urban areas, women and children are responsible for collecting fruits and fuelwood for sale and home consumption. It is therefore very important to strengthen the tenure rights of women and mobilize them in community forestry programmes, because they are the people who stand to benefit most. This is especially important in the three northern regions and the coastal savannah, where increased access to fuelwood supplies would improve women’s socio-economic conditions and give them more time to farm. Another factor of tenure that affects women is that they do not benefit directly from inheritance because of secondary rights to land and polygamous marriages.

HUMAN AND FINANCIAL ARRANGEMENTS FOR FOREST RESOURCE MANAGEMENT
The Forestry Commission Act 1999 aims to provide effective and efficient institutional arrangements for its divisions and units involved in sustainable management of Ghana’s forest and wildlife resources. The functions of the Forestry Commission include assisting the private sector and other bodies with implementation of the 1994 Forest and Wildlife Policy, through providing advice and technical services for resource protection, management, development, and the establishment of forest plantations. These activities ensure that individuals have continued access to their forest resources and tree ownership investments. In practice, however, the Forestry Commission’s protection of forest resources – even within its own permanent protected areas – is hampered by illegal chainsaw and mine operators. Illegal farming has even led to the loss of once pristine forest on permanent protection areas. A major cause of ineffective forest protection was the downsizing of the Forestry Department’s staff when several divisions were merged to form the Forestry Commission. Although the laying off or redeployment of elderly or ineffective forest guards and technical officers was a
positive development, the drivers of the merger were too insistent about reducing employment numbers, especially in the Forestry Department, given the increase in illegal chainsaw operations and the department’s inability to tackle this environmental menace effectively. Another negative factor was the greed and unethical practices of some officials, contractors, politicians and stool landowners, which led to loss of motivation among forest guards and range supervisors and a general lack of trust in the department’s capacity to manage the resource base sustainably.

Most of the off-reserve forest plantations owned by the community, private individuals or institutions are plantations of exotic species or mixed stands of indigenous and exotic species. In general, these forests lack human and financial resources, so silviculture and thinning practices are often not carried out until the plantations are ready for final extraction, when they resemble mature timber trees. This situation is particularly true of scattered community and individual forest plantations. A few institutions and private plantation developers do have the necessary human and financial resources for forest management, however.

The Forestry Commission is a public institution with budgetary allocations from the government; its operations can suffer serious delays and financial constraints as a result of this dependency. It was meant to be self-financing by 2005, but this target was not reached, so it still depends on government funding for its activities, with donor support for specific projects and programmes. At present, industry’s reluctance to pay the Forestry Commission’s export levies is causing a major budgetary imbalance, which prevents the commission from continuing to protect and manage the forest estate.

The Forest Plantation Development Fund Act of 2000, amended by the Forest Plantation Development Fund (Amendment) Act of 2002, established a fund to provide financial assistance to community, individual and private plantation developers for plantation development, research and technical advice. Section 3(3) of the act assures beneficiaries the right to own any timber produced, as long as they observe the conditions set out by the fund’s management board. The aim of this is to ensure growth of this sector of the economy.

Capacity could be strengthened through laws or legal actions such as assuring long-term tenure security (of at least two rotations) throughout the limited maximum leasehold period permitted for non-Ghanaians. This could be achieved without amendment to the Constitution – by decoupling landownership from tenure of planted trees – so that international and local investors do not have to lease or otherwise acquire land, but can instead enter partnerships with landowning stools or other entities that use their land as share capital in the partnership.

It is also necessary to prevent unlawful seizures and expropriations by local communities through compensation. The Timber Resources Management (Amendment) Act of 2002 makes adequate provisions for the risk of expropriation by the government or State. It does not specify the actions to be taken when investors’ rights are infringed, however, and it is not possible to proceed against a local community or section of a community in the law courts.

Incentive systems for forest resource ownership are provided in Sections 14A to 14J of the act. Incentives include the repatriation of profits from investments, and exemption from duties, value-added tax etc. for non-zero-rated plant, machinery and equipment. Guarantees against expropriation are provided for investments in the forestry and wildlife sector. The Plantation Development Fund supports private developers with grants payable at harvesting of the timber resources.

**POLICY AND LEGISLATION**

Before the 1994 Forest and Wildlife Policy was passed, forestry sector governance was disorganized and facing a crisis. The forestry and timber sectors collapsed, along with the national economy, in the 1980s.

Some of the guiding principles of the 1994 policy relate directly to forest ownership and resource tenure for SFM. These principles include people’s right to have access to natural resources for maintaining a basic standard of living, and their responsibility to ensure the sustainable use of such resources. The nation depends on wise use of forest and wildlife resources as part of an integrated land-use policy; these resources contribute to the economy.
by maintaining vital ecological and life-sustaining processes and conserving pools of genetic material, offering development opportunities for tourism, scientific, cultural and education advancement and the flow of benefits to local communities.

Since the coming into force of the 1994 policy, very little new legislation has been made. The following two enactments, which directly support forest ownership and resource tenure and link up with SFM and poverty reduction, were rolled out 11 years after the policy:

- The Timber Resources Management Act of 1997 replaces the concessions system with TUCs, which are allocated through competitive bidding among qualified companies. Contracts have temporal and spatial limits. This act extends the investment incentives available in other sectors to investors in the forestry and wildlife sector. The Timber Resources Management Regulations of 1998, as amended in 2002, prescribe procedures and criteria for the granting of timber rights through a competitive process.
- The Forest Plantation Development Fund Act of 2000 establishes a fund that provides financial assistance and fund management for the development of forest plantations.

It is notable that neither of these laws supports the concept of community participation in resource management. The Collaborative Resource Management Unit of the Forestry Commission’s Resource Management Support Centre has made very little progress through CFCs and forest fora. In addition, the laws passed do not improve the sharing of benefits from timber exploitation for farmers or tree owners. The reasons for this unfortunate situation include poor post-independence policy management, a lack of legislation, weak policy consultation and consensus building, ambiguous policies, disruptive industry influences, and institutional problems (Bilijo, 2005).

According to Opoku (2005), the 1994 policy did not establish an effective legislative programme for benefit sharing and participatory resource management. It suggested that a new Forest Act be drawn up by 1996, but the Ministry of Lands, Forestry and Mines shelved plans for this act to avoid giving politicians too strong an influence on the reform drive. Since 1994, the legislative programme has been very limited and timber-biased, and does not include benefit sharing and participatory management issues. Opoku states that substantive changes in policy, legislation and practice are more likely to occur now, because of the current increase in social activism and assertion of the rights of forest fringe communities, which are supported by both local and international NGOs.

Bilijo (2005) claims that poor post-independence policy management is a result of the weak policy management the forest sector has experienced since 1951. He believes that this is caused by the public administration that developed after independence. No efforts appear to have been made to address the growing disparity between policy and law in the sector – for instance by amending policies to respond to changing circumstances – so now few people in forest administration are familiar with the policy. Weak policy consultation has failed to empower rural people, by granting only limited recognition of stakeholders’ rights and responsibilities. Empowered stakeholders would have helped ensure that officials carried out the responsibilities defined in the 1994 policy, because the officials would have had to make enforcement commitments to landowners and communities.

Institutional problems in the forestry sector, such as the lack of an in-house legal department until recently, have aggravated the flaws in legislation.

The current (1994) policy is overdue for review to take into account emerging national requirements and address issues of international concern.
Assessment of the different forest tenure systems

CONTRIBUTION TO SUSTAINABLE FOREST MANAGEMENT AND POVERTY ALLEVIATION

A comparative analysis was made of the different tenure systems to assess their contributions to SFM and poverty reduction.

Forest reserves
The tree tenure system operating in forest reserves is different from those operating outside forest reserves. Because the forest reserves are fully vested in the State, through the Forest Ordinance of 1927, there are requirements for entry, such as timber rights, permits for timber exploitation, permits for NWFPs and the provision of guaranteed usufruct rights. Most management plans for forest reserves use permits to define communal rights to hunt, fish, collect fuelwood, snails and medicinal plants, and farm on admitted farms. Admitted farms are farms that already existed at the time of reservation, whose farmers/owners were granted continued access following the reservation process. According to Agyeman (1993), communal rights have been the subject of dispute between the government and communities, because communities want unrestricted access to the forest on the grounds that they contribute in preventing illegal timber exploitation. Agyeman also reports on a survey in which several respondents complained that the procedures for acquiring permits were cumbersome and that FSD did not readily give permits for some items. FSD, on the other hand, claimed that it issues permits quickly, unless it has difficulties with supervising and monitoring them. In reality, prevailing conditions make the forest reserve highly inaccessible to the marginalized poor regarding use of tree resources and the acquisition of permits for NWFPs, such as canes, raffia palm and chew-sticks, for which there is demand in urban centres.

The main reasons for fringe communities’ lack of access to forest resources are the highly bureaucratic and centralized processes involved, and the communities’ distance from district forestry offices. Time constraints and competing demands on limited budgets at FSD are another factor. There are few incentives to encourage initiatives that create jobs and reduce poverty for fringe communities. In spite of the policy shift towards collaborative management, forest resources still face serious encroachment because of inequities regarding benefits and the lack of enforcement of forestry rules. While wildlife protected areas are strictly maintained by well-trained and armed staff, illegal chainsaw operators are still able to pitch camp in the heart of forest reserves, and sometimes even exchange fire with military task forces whose assistance has been sought. This scenario could be blamed on State control of forest resources, and thus call for the devolution of management, but other social factors may also be involved.

Off-reserve forests
Ownership rights to economic timber trees in off-reserve forests also rest with the government, but access to other forest and tree resources depends on the prevailing landownership and inheritance system. Generally, tree resources are allocated to satisfy the increasing domestic and fuelwood demands. The greater a tree’s economic value, the greater the restrictions placed on its use by landowners, especially for tenants and immigrants. It is difficult for immigrants to own trees through planting on the land they rent. Such tenure restrictions reduce tenant farmers’ attachment to their farmlands and are major disincentives to SFM and poverty reduction. Land tenure rights and land administration have to be fully reviewed so that their contributions to both local and national economies can be increased through SFM and poverty eradication.
Traditional, community and private forests

Traditional authorities employed indigenous strategies to prevent human activities from encroaching on sacred groves. The influence of Western culture, Christianity, education and their attendant modernization have eroded many of the basic tenets underpinning the survival of traditional reserves. Rising population, coupled with increased demand for agricultural land and infrastructure have also led to serious encroachment of some sacred groves. Although some groves are well-preserved with few or no signs of degradation, others have been seriously affected by farming activities, unauthorized logging, bushfires, housing development, hunting and gathering expeditions, road construction, and mining. Some groves have degraded beyond recovery as a result of encroachment.

Local communities and NGOs have initiated rehabilitation programmes in some groves, but a major setback to the management and monitoring of sacred groves is the lack of data with which to elicit support from interested groups. If they are well managed, some of the sacred groves that have survived in permanently protected forest reserves could provide benefits such as genetic material for research, and environmental improvement through microclimatic effects. At present, however, sacred groves are not being properly managed and have only a minimal effect on poverty reduction.

Participatory forest management involving fringe communities is the most effective forest management system currently practised in Ghana. An evaluation report of pilot CFCs carried out by the Forestry Commission found that within two to three years of their establishment, CFCs in some forest reserves and forest districts had positive impacts. Improvements included: changed attitudes towards forest conservation and tree planting; the incorporation of trees into the farms of CFC members and other farmers; prompt payment of compensation for felling damage; government officials’ recognition of communities’ role in forest management; communities’ improved ability to initiate and implement forestry activities; and reduced bushfire. The successful rehabilitation of degraded forest reserves through the MTS has created a flow of benefits to forest fringe communities, and is a real show piece for SFM and poverty reduction.

MANAGEMENT AND HARVESTING OF TREES AND FORESTS

The following analysis of which tenure category works best focuses on resource management by the Forestry Commission.

Laws lay down the procedures for harvesting and disposing of the resources under Forestry Commission authority, but do not define proper management practice. The technical conditions prescribed for proper harvesting and the additional requirements expected of timber right holders can be said to sum up the conditions that ensure SFM and poverty reduction through the flow of benefits to forest fringe communities.

This case study focuses on the additional requirements expected of timber right holders, which include:

- an SRA;
- a reforestation plan;
- social amenities;
- specifications of timber operations.

An SRA has to be settled between the holder of a TUC and the community that owns the land or forest. According to the logging manual, the SRA should contain a code of conduct requiring the TUC holder to respect the rights of the landowning communities with respect to farming operations, NWFPs and revenue from harvesting. Other rights and obligations can be added as appropriate. The regulation stipulates that the reforestation or afforestation plan must provide at least 10 ha of forestation for each square kilometre of contract area (i.e., 10 percent of the area allocated). It does not mention where such forestation should take place. The TUC
holder must provide social amenities to the inhabitants of the contract area, the cost of which should not exceed 5 percent of the annual royalty accruing from operations under the TUC. The TUC holder also has to agree with the landowning communities the timber operational specifications, which might include obliging the TUC-holder to provide a certain amount of off-cuts for community use, employment, financial support, etc.

The technical conditions for proper harvesting prescribe that no harvesting is permitted without a TUC; this means that even the person who planted and maintained the trees cannot harvest them for commercial purposes without a TUC. TUCs outside forest reserves cannot be granted without the written permission of the landowner on whose land the forest plantation or timber stands. If the landowner does not give permission, a committee should consider whether she/he is justified and should then submit a report to the regional forestry manager with the comments and recommendations of the district manager. If neither the landowner’s permission nor a committee report can be obtained, the TUC cannot be granted. The amendment act has removed this class of forest tenure from TUC allocation procedures.

While the TUC applies to all the trees in a stipulated area, a TUP allows the harvesting of only a specified number of trees. A TUP can be granted to a community, town committee, rural community group or NGO to harvest a number of trees for social and community purposes from areas that are not under TUCs.

ADAPTING PLANNING AND MONITORING SYSTEMS

The efficacy of the management standards set by FSD should be monitored, mainly to ensure the sustainable utilization and management of the timber resource base. Ghana is developing mechanisms for this. In January 2005, the Forestry Commission and SGS launched a joint Validation of Legal Timber Programme (VLTP) to develop a framework for the independent verification of legal compliance in timber production and trade, from the forest unit to the port of export. VLTP entails the implementation of a real-time log tracking system and the establishment of a body within the Forestry Commission to monitor data allocation and the verification process. To date, the joint programme has encouraged stakeholders to support VLTP and agree on a basic roadmap for implementation.

Through improved monitoring and verification of timber harvesting rights, extraction, transport processing and wood distribution, the Forestry Commission expects to increase revenues from the country’s forest. Industry leaders in Ghana also expect to secure a larger long-term share of the European Union (EU) market for tropical hardwoods through the promotion of verified legal timber products. So far, SGS has assessed the existing forest monitoring and control systems and identified appropriate tracking systems, which will soon be field-tested. The maintenance costs of the chosen systems are expected to be between US$0.50 and US$2.00 per cubic metre. VLTP is now ready to roll out its verification procedure to the national level, to implement the tracking and monitoring systems in full. The first validated certificates for export were expected to be issued by the end of 2006. The programme aims eventually to cover domestic distribution, but will initially focus on the major export supply chains. The system is an important step in improving revenue collection, combating corruption in the forest sector, and aligning timber harvesting to legal and sustainable limits (Ghana Gazette, 2005).
Conclusion

Resources in both on- and off-reserve forests are increasingly threatened by growing population pressure and the resulting increased demands for domestic timber, arable land and land for construction. Heavy logging, resulting from increased international demand and the availability of powerful log extraction and transportation equipment, has also contributed to the decline of the forest estate. This situation leads to very poor access to forest and forest resources for local populations, unsustainable forest management, environmental degradation and increased poverty, which is exacerbated over time. The establishment of forest reserves has created animosity between local communities and FSD because of the communities’ loss of access to benefits and the perception that the reserves were created without prior consultation. Although the reservation policy has been successful in the reserves themselves, it has had a negative impact on tree and forest protection outside forest reserves. The failure of most community forest interventions can be attributed to the government’s failure to communicate the benefits of reservation, and the communities’ notion that their land has been usurped. Communities are rarely informed of their usufruct rights, leaving the government to assume a policing role in its forest management and protection work.

Customary tenure and inheritance systems that discourage the planting of trees also contribute to forest decline. By including standing trees in land rights and ownership, many traditional laws discourage farmers – especially tenants and immigrants – from planting trees. Equally important is the decline in traditional belief systems, which has resulted in reduced protection of traditional forest areas, as exemplified by the degradation of sacred groves. The Forest and Wildlife Policy of 1994 it expected to increase the involvement of communities and the public in the development, management and utilization of forest resources, thereby addressing many of the issues that affect SFM and poverty reduction.

A key finding of this case study was that participatory management of the forest estate involving forest fringe communities is the most effective forest management system.

PROPOSALS FOR THE WAY FORWARD

Civil society is demanding policy reform and compliance and changes to the international market environment, such as access to markets that endorse and accept timber from sustainably managed sources only.

The establishment of forest reserves has not ensured a flow of benefits to forest fringe communities, as demonstrated by an analysis of the benefits accruing to timber operators, stool landowners and communities. Greater community participation in the management of forests via the collaborative forest management approach is seen as the solution to this problem. In the meantime, forest fringe communities derive the same benefits from forest reserves as the communities that are distant from the reserves.

The Forests and Wildlife Policy of 1994 has not guaranteed the protection of trees and forests outside forest reserves because it cannot confer clear ownership rights over forest and tree resources to farmers or other users. The current system of landownership needs to be reviewed by the appropriate authorities, in consultation with local people to ensure that their needs and requirements regarding forest ownership are catered to. By granting farmers full ownership rights to the naturally occurring and planted timber trees on their farmlands, and enabling them to dispose of the trees as value items, the issues of SFM and poverty reduction can be collectively and continually addressed.

A rapidly growing population – expanding by 2.6 percent a year – and people’s changing attitudes to customary laws and practices are among the forces that work against SFM; public education is required to rectify this.

The next policy revision should promote community forest by encouraging communities to create their own reservations. This will eliminate the negative effects of the 1974 Trees and Timber Decree, which made the government the owner of all timber trees in Ghana.
It is strongly recommended that land and tree tenure legislation to strengthen the rights of tenants be enacted. Immigrants and tenants constitute almost 35 percent of rural populations, and customary laws discourage them from planting trees because landowners believe that doing so would increase the security of tenants’ land rights (Agyeman, 1993). This situation could be addressed by provisions that encourage landowners to undertake long-term leasing of their land to match tenants’ long-term investments in forestry. Landowners should be offered incentives such as shares in the revenue from intermediate thinning and final crops. The concept of community forestry farms should be encouraged, based on principles that give immigrants and tenants equal access. Through this, farming systems such as agroforestry can be introduced, increasing the benefits from forest land.

Laws are also needed to strengthen women’s rights to own family and private property. Customary laws should be reviewed to encourage the succession of daughters, instead of nephews to private or family land.

Forestry extension services for private tree growers are needed, and education programmes on forestry-related issues should be directed towards increasing the general public’s understanding of forestry issues.

An extension services section or division, similar to the Ministry of Food and Agriculture’s agricultural extension services, is urgently required to educate people on the need for SFM, conservation, tree planting and poverty reduction approaches to forest ownership and forest resources tenure.

CFCs and farmers should be strengthened to support local communities on issues such as forest ownership and forest resources tenure. The issuance of permits for NWFPs by the district manager should be enhanced and decentralized to range supervisors, with effective monitoring that ensures sustainability and compliance.
References

ANNEX 1. MAP OF GHANA
ANNEX 2. VEGETATION ZONES AND FOREST RESERVES IN GHANA

VEGETATION ZONES AND FOREST RESERVE MAP OF GHANA
(Hall & Swaine)
ANNEX 3. ROAD AND FOREST MAP OF GHANA