

Forest Certification in Uganda

Polycarp Musimami Mwima, Gerald Eilu,** Byamukama Biryahwaho,***
William Gombya-Ssembajjwe*****

ABSTRACT

Interest in forest certification in Uganda as a tool for promoting social, environmental and economic sustainability is at a nascent, but arguably emergent, phase. External actors have largely driven existing efforts, many of them supporting reforestation as a means of carbon sequestration. Choices made by government officials, actors in the timber industry, and external agencies in the next few years could result in an increased role of forest certification in promoting responsible forestry. For instance, forest certification could provide external recognition for, and pressure to maintain and enhance the existing reforms to public policy. This will be achieved by providing a globally accepted framework with which to assess and promote domestic sustainable forest management. Two specific impacts seem plausible. First, unlike other cases reviewed in this book, forest certification might first gain a strong foothold in Uganda as a way of verifying protected area status – i.e., addressing the criticism that many reserves exist on paper only, or that they fail to take into account local people's livelihoods. Second, certification may be useful in promoting the use of non-timber forest products and carbon sequestration efforts.

* Polycarp Musimami Mwima
Program Officer, Monitoring
and Evaluation, Environmental
Conservation Trust of Uganda
(ECOTRUST) P.O. Box 8986,
Kampala, Uganda
pmwima@ecotrust.or.ug

** Gerald Eilu, Ph.D.
Makerere University, Faculty
of Forestry and Nature
Conservation P.O. Box 7062
Kampala, Uganda
eilu@forest.mak.ac.ug

*** Byamukama Biryahwaho
Program Officer, Special
Projects, Environmental
Conservation Trust of Uganda
(ECOTRUST) P.O. Box 8986,
Kampala, Uganda
bb@ecotrust.or.ug

**** William Gombya-
Ssembajjwe, Ph.D.
Makerere University, Faculty
of Forestry and Nature
Conservation, P.O. Box 7062
Kampala, Uganda
gombya@forest.mak.ac.ug

INTRODUCTION

Interest in forest certification in Uganda as a tool to promote social, environmental and economic sustainability is at a nascent, but arguably emergent, phase. Virtually all developments involving forest certification in Uganda will be affected by, and recognize, that in five to ten years there will be a serious domestic shortage in wood supply, caused by two interrelated factors: increasing population growth, and a twenty year lag between establishment of the first softwood pine plantations thirty years ago and the second crop (Uganda Forest Resources Management and Conservation Programme 2004). Forest certification will interest domestic actors if it can help promote long-term sustainable plans that help to avoid mistakes of the past, and if it can promote short and long-term economic benefits. In Uganda's case, the potential economic benefits of forest certification appear, in part, to be different from other countries in that they come not from traditional commercial timber harvesting, but from the promotion of utilization of Non Timber Forest Products (NTFPs), including non-consumptive forest products (e.g. eco-tourism and watershed management), that could benefit from forest certification. In addition there are a number of initiatives that promote forest/tree management for the carbon market that could benefit from certified emission reductions (CERs). Above all, forest certification will be attractive to the Ugandan forest managers – government and private forest owners alike – if it brings with it a price premium and does not add to forest management costs.

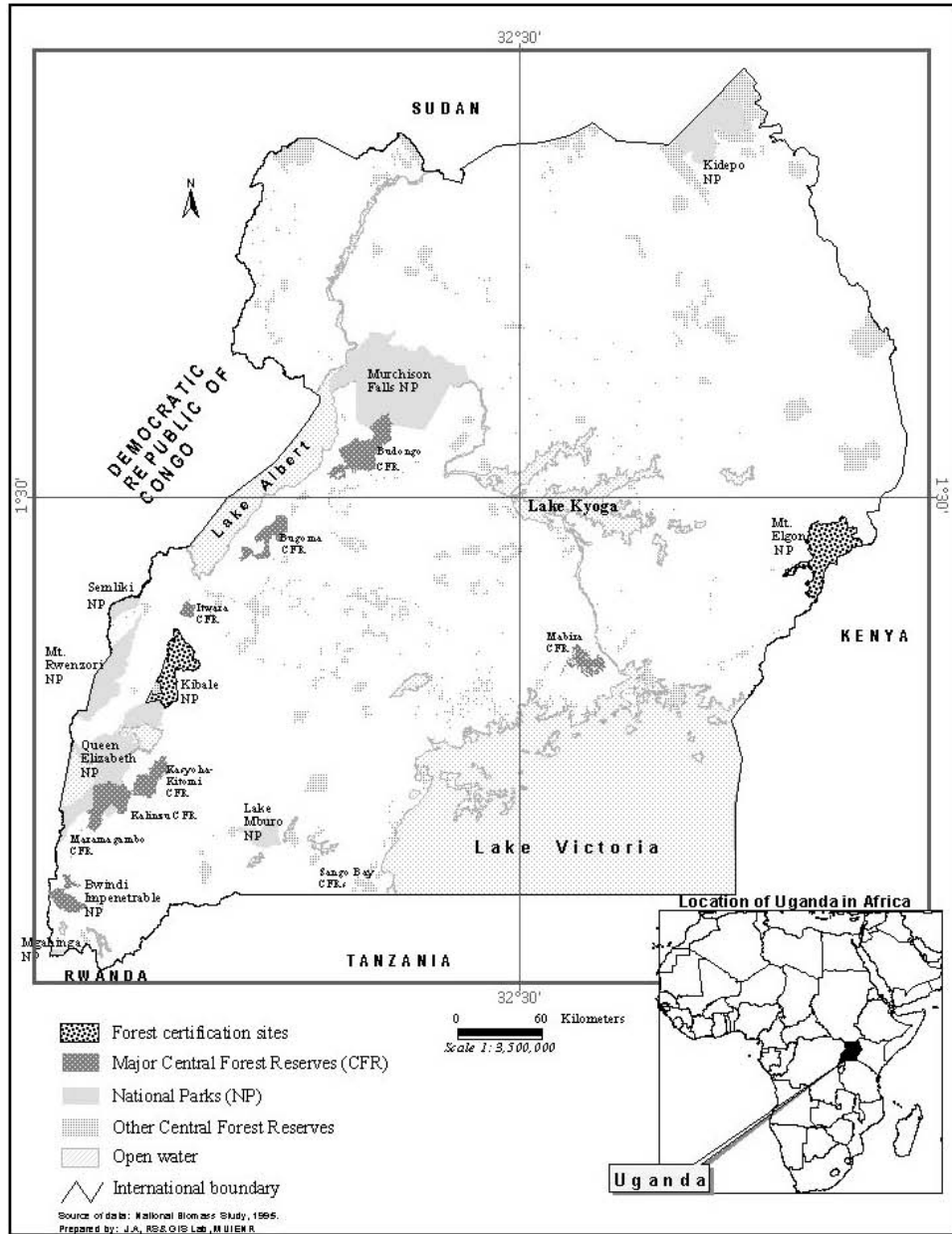
For these reasons, forest certification has been largely driven by external actors. Such efforts have included using forest certification as a means of demonstrating carbon sequestration efforts in order to promote natural forest regeneration in national parks. This is important because it shows that, in Uganda, forest certification efforts often intersect with existing public policy intergovernmental efforts – in this case with global agreements on climate change.

There is similar potential for forest certification through development of plantations on both Government of Uganda forest estates and privately owned land. With a conducive environment in place, through the development of policy and institutional frameworks that aim at promoting sustainable forest management both inside and outside protected areas, forest certification may provide lessons as well as a tool for promoting responsible forest management practices. Indeed, certification may provide the most recognized and “legitimate” arena in which to assess whether, and how, forest management can provide for ecological, social and economic benefits with the participation of all stakeholders and a strong emphasis on communities that derive their livelihoods from the forest.

For these reasons choices made by government officials, the timber industry, forest dependent communities and external agencies in the next few years could result in an increased role for forest certification in promoting responsible forestry. Certification could help recognize and maintain public policy reforms. This would be achieved by providing a globally accepted framework with which to assess and promote community and farm level forest management practices.¹ This case study outlines these developments.

¹ Research for this case study was conducted through interviews and discussions with key informants, mainly officials working in conservation agencies both government and nongovernmental, as well as review of relevant literature, mainly project reports and policy documents.

Figure 1 Totally Protected Areas (TPAs) and forest certification project sites in Uganda



BACKGROUND FACTORS

Historical Context

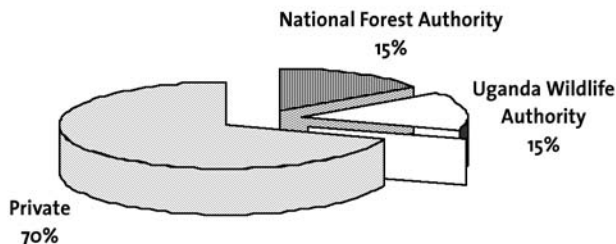
Forests and woodlands cover approximately 4.9 million ha, about 24 percent of the total land area (Uganda Forest Policy 2001). Plantations constitute 1 percent of the national forest cover while Tropical High Forests (THF) and savanna woodlands constitute 99 percent of woodlands. Uganda has a large number of Protected Areas (PAs) that together cover about 13 percent of the country. The PAs fall under two broad categories (National Parks and Wildlife and Forest Reserves), and are managed independently of each other by the Uganda Wildlife Authority (UWA) and the National Forest Authority (NFA), respectively. About 1.9 million hectares of the PAs form the Permanent Forest Estate (PFE). This includes all forest reserve land and all forested areas in the National Parks and Wildlife Reserves (Figure 1).

The Permanent Forest Estate represents about 9 percent of the total land area of Uganda. These areas are set aside permanently for conservation of biodiversity, protection of environmental services, sustainable production of domestic produce, and some commercial forest produce such as timber. Half of the PFE is made up of the gazetted central and local forest reserves, land that is held in trust and managed by the National Forest Authority and Local Authorities. Under the NFA jurisdiction, there are seven major closed Central Forest Reserves (Budongo 793 km²; Maramagambo 443 km²; Kasyoha-Kitomi 399 km²; Bugoma 365 km²; Mabira 306 km²; Sango Bay Forest Reserves 157 km²; Kalinzu 137 km²) totaling to about 2,300 km² and a number of smaller forest reserves (altogether totaling to 704 reserves), many of them located in savanna areas (Howard 1991). The other half includes the forested areas of National Parks and Wildlife Reserves, land held in trust and managed by the Uganda Wildlife Authority (UWA). Details are presented in Table 1 and Figure 2.

Table 1 Approximate areas (ha) of forest and woodland under different categories of ownership and management

	Government (Gazetted) land		Non-Gazetted Land	TOTAL
	Central/Local FR	National Park/Wildlife Reserves	Private & Customary Land	
THF	4,170	3,210	1,467	8,847 (5%)
Woodlands	7,200	0	33,078	40,278 (19%)
Plantations	306	20	19	345 (0.2%)
Total Forests	11,676	3,230	34,564	49,470
Other cover types	414,000	1,167,000	13,901,000	15,482,000 (76%)
Total Land	425,676	1,170,000	13,935,564	15,531,240

Source: National Biomass Study 1995

Figure 2 Management of Uganda's forest land

About 70 percent of forested land in Uganda includes large areas of forest and woodland on private land or customary land (Table 1 and Figure 2). A National Forest Authority (previously, Forest Department) has been instituted for a greater focus on the sustainability of the nation's forest resources. The government of Uganda has also set up a Forest Inspection Division (FID) in the Ministry of Lands, Water, and Environment. Its mission is to coordinate, guide and supervise Uganda's forest sector and contribute to the rational and sustainable utilization, development, effective management, and safeguarding of forest resources for social welfare and economic development. The National Forestry and Tree Planting Act of 2003 empowers the FID to sensitize key stakeholders on opportunities including forestry in agricultural services. The FID provides guidelines supporting SFM to all stakeholders including privately owned forests in addition to its regulatory roles.

Forestry Problems

From 1934 to the early 1970s, the forest services in Uganda enjoyed an international reputation for practicing some of the world's best tropical forestry on Permanent Forest Estates (PFE) (Plumptre 1996). However, this reputation was based on conventional forest management principles that over-emphasised the forest's timber-producing role and largely ignored its social and ecological roles (Plumptre and Reynolds 1994; Mupada 1997). In the early 1990s, concerns that forest management was damaging the forest ecosystem's structure and function led the government to change the conservation status of six major forests (Mgahinga, Bwindi, Rwenzori, Semliki, Kibale and Mount Elgon), based on their exceptional biodiversity values of global significance or importance as water catchment areas, from gazetted forest reserve (where forest harvesting was permitted) to national park status that forbade commercial harvesting. However, current forest management plans operating under the Forest Service are strongly oriented toward timber production activities (Uganda FRMCP 2004). The enforcement of environmental laws, statutes, and policies that have been put in place to support sustainable management of the TPAs in Uganda is limited due to limited funds and staff. Management plans for the forest reserves have been or are being reviewed to address the stated forest problems in Uganda. However, clearing for agriculture, construction, illegal harvesting, limited manpower, and limited involvement of local communities still hinder the management of forests.

Policy Responses

Most conservation efforts in Uganda are directed at the gazetted (protected) areas. The government of Uganda, through the restructuring program of the FD, has established the NFA to be in charge of the country's forest resources, central forest reserves and plantations (personal interviews, NFA). The NFA was inaugurated on 26th April 2004. The Executive Director (ED) heads the NFA, and under the ED are three directors – of Field Operations, of Support Services and Finance, and of the Administration and Personnel Divisions. The FRMCP under the NFA predicts that in the next five to ten years, there will be a timber deficit in Uganda because of increased population and because most of the soft wood plantations (which were planted more than 30 years ago) will have been harvested. The NFA therefore aims at establishing quality plantations for timber production to meet these demands with the hope of certifying these plantations (personal interviews, FRMCP). A saw log production grant scheme of 1,920,000 Euros from the EU is planned to support the establishment of plantations. Private institutions or individuals as medium scale investors with a minimum of 100 ha are eligible to apply for this grant (MWLE 2004). The government of Uganda is also in the process of establishing a plantation development fund to support this initiative.

In 1995, the government initiated stamping of timber in the FD, which is a chain of custody system that facilitates labeling and is related to the certification process. The Timber Monitoring and Tracking Unit (renamed Forest Produce Monitoring Unit in 2003) carry out this stamping of timber. Four main reasons led to the establishment of this unit (personal interviews, Forest Department): 1) to stop illegal trade in timber, charcoal, and poles; 2) to control harvesting of plantations and natural forests; 3) to monitor the origin of forest produce (timber) on the market; and 4) to provide data on harvested volumes to the department's database e.g. volumes harvested from respective districts and Forest Management Units, revenues collected, and saw mill operators in each district.

Two types of hammers are used to stamp the timber – the field hammer used by the forest rangers and the district seal hammer used by the district forest officers (DFOs). While in the field, a saw miller fells marked trees whose royalty fees have been paid, depending on the class of the species (Table 2, next page). The volume to be converted is noted by the forest rangers. After felling, the field hammer is used to mark the respective stumps of trees felled, and a forest declaration form is filled after converting the logs, indicating details such as volume of timber, forest, and trees felled. The saw miller then takes the form and timber to the DFO for verification and assessment of tax to be paid. The DFO then stamps each piece of timber with the district seal hammer and issues a forest produce movement permit. Each district has its own code for the seal hammer. Imported timber has a special hammer labeled **Imp** and showing the name of the entry point. The DFO then fills the timber harvesting Volume Measurement Forms to be submitted to the headquarters for entry of data into the database.

The Forest Produce Monitoring Unit moves to the markets in various parts of the country to look for illegal timber on the market, which is confiscated, and the culprits

fined or prosecuted. Area Forest Managers take the lead in implementation of forest activities in place of DFOs in the new NFA structure. Under the NFA timber tracking initiatives piloted at Kalinzu Central Forest Reserve, area managers, sector managers and field supervisors have specific codes on their stamps defining the forest zone, supervisor, and forest codes on top of the block, species and licensee codes. Four classes are used to charge royalties of trees that are felled in a forest or plantation (Table 2).

Table 2 Timber classes used to charge royalty in Uganda

Class	Royalty (U Shs M ⁻³)	Examples of Tree Species
1A	100,000/=	Elgon teak (<i>Olea capensis</i>) Mahoganies (<i>Entandrophragama spp</i> ie <i>E. utile</i> , <i>E. cylindricum</i> , <i>E. angolense</i> , <i>E. excelsum</i> , <i>Khaya spp. i.e. K. anthotheca</i> & <i>K. grandifoliola</i>),
		Nkoba (<i>Lovoa trichilioides</i>)
		Mvule (<i>Milicia excelsa</i>)
1B	45,000/=	<i>Cordia sp.</i>
2	28,100/=	Musizi (<i>Maesopsis eminii</i>)
		Musambya (<i>Markhamia lutea</i>)
3	17,000/=	<i>Eucalyptus spp</i> , <i>Antiaris toxicaria</i>

The classification is based on the scarcity of species, mechanical properties, and the rotation time. The royalties for threatened species are hiked to encourage use of alternatives. However, royalties are not paid for the timber that is sourced from private land. Moreover, registered timber dealers desire that the timber-monitoring unit becomes more effective to ensure price stability. Prices are normally unstable mainly due to illegal timber trade.

Applications (by saw millers) for licenses to harvest are addressed to the Minister of Water, Lands, and Environment, who then forwards them for consideration by the Licensing Committee in the Ministry. Approved applications are given licenses on payment of a statutory fee. The license has conditions, which the licensee accepts by signing. The conditions cover legal, technical, administrative and social aspects that deal with responsible harvesting and conversion of timber. A copy of the license is sent to the AFM, who in turn gives copies to the district leaders. The license is normally valid for one year subject to revision unless the licensee contravenes the conditions of the license and the law established. Harvesting in natural high forests is done by pit-sawing. At present, there is only one sawmill (Budongo saw mill) operating in natural forest harvesting, mainly *Cynometra alexandrii* for floor parquets. Its operation is at a very small scale. The same licensing procedure used in sawmilling applies to the pit sawyer except that the pit sawyers apply through the Local Council authorities. Pit sawyers provide timber for industries.

Sometimes saw millers are licensed to plant trees. Nileply is a big company that makes plywood and flash doors. The company has also planted its own trees,

approximately 300 ha in Jinja. They are also managing Mutai Forest Reserve (287 ha of *Eucalyptus* spp.) whereby they pay forest dues annually and harvest the trees themselves. Apart from saw millers and pit sawyers, there are also private tree farmers who ask for licenses to practice forestry in forest reserves. A list of such individuals is given in Table 3.

Table 3 Private tree farmers that are licensed to practice forestry in Forest Reserves

Company	Forest/district	Area (ha)	Area planted (ha)	Species planted
BAT	3 FRs in Apach	70	70	<i>Eucalyptus</i> spp.
Busingye Jack (RIP)	Bushenyi	127	127	<i>Pinus</i> spp.
Uganda Tobacco Growers Co.	Kalinzu	ND	ND	<i>Eucalyptus</i> spp.
Busoga Forest Company	Bukaleba	5,000	700	<i>Pinus</i> spp.
Saudi Marble	South Busoga	2,400	ND	Broadleaved woods for timber
Nileply	Kagoma	ND	Approx. 300	<i>Pinus</i> spp.
ND	Nsuube	277	230	<i>Eucalyptus</i> spp.

ND: No data available.

Source: Forest Produce Monitoring Unit 2002

The current process of stamping timber is helpful in curbing illegal timber activities but is so far hardly effective for encouraging sustainable forest management principles and serves more towards curtailing illegal activities. Limited funding for the monitoring activities has resulted in poor surveillance mechanisms limiting control of illegal activities. There have been cases of imported timber being stamped as local produce, and timber from private landowners is assessed for payment of taxes only. However, if well funded and the staff well motivated, it is a good intentioned process that may contribute towards SFM.

Structural Features

Ownership and Tenure

The management and ownership of the forest estate in Uganda falls under gazetted (protected) areas managed by government parastatals, and private or communal ownership managed by individuals or communities. The Forest Inspectorate Division (FID) among others duties monitors, regulates and provides guidelines for SFM across all sectors in the country. The gazetted forests are managed by the Uganda Wildlife Authority (UWA) or the National Forest Authority.

UWA's mission is to conserve and sustainably manage wildlife resources and biodiversity inside Protected Areas (PAs) that are under its jurisdiction (National Parks and Wildlife Reserves) and outside (the PAs) for the benefit of the present and future generations of Ugandans and the global community. Extraction of resources is mainly limited to non-consumptive purposes. Under UWA, national parks cover 4.6 percent of the country while wildlife reserves cover 15.35 percent (which in the past included wildlife reserves 3.6 percent, wildlife sanctuaries 0.35 percent and community wildlife areas 11.4 percent).

The National Forest Authority (NFA), formerly Forestry Department (FD), is in charge of the country's Central Forest Reserves and Plantations. The NFA is aimed at supporting a vigorous private sector and a more effective forest administration in line with the processes of decentralization and privatization. Under NFA jurisdiction there are seven major closed Central Forest Reserves totaling about 2,300 km² in area. There is another 704 smaller Forest Reserves ranging in size from 0.3 km² to 500 km², many of which are in savanna areas. It provides for sustainable extraction of both consumptive and non-consumptive forest resources.

Forests in Uganda are therefore either directly under government or private management. Under government are the Permanent (Gazetted) Forest Estates (PFE) that includes Forest Reserves, and Forests in National Park and Game reserves. Amongst the Forest reserves, Central Forest Reserves (CFRs) are under the jurisdiction of the National Forestry Authority and Local Forest Reserves are under district forest authorities. Timber extraction, in addition to extraction of non-timber forest products, is allowed in the Forest Reserves. The forests in National Parks and Wildlife Reserves are mainly for biodiversity conservation where extraction of timber is prohibited.

The private forests are located in areas not gazetted, and little attention has been paid to them in the recent past. These private forests are of significance with respect to biodiversity conservation and provide the bulk of the resources in daily use (Pomeroy and Mwima 2002; Moyini 2001; Nabanyumya and Kakuru 1996). There is an estimated overall loss of biodiversity at a rate of about 13-15 percent per decade (Pomeroy and Mwima 2002) which includes loss from private forests. The uneven distribution of people (due to factors such as climate, history, soil fertility, etc.) means that the distribution and amount of such ungazetted ("open land") forests is also uneven in Uganda. In heavily settled areas, such "open land" is highly fragmented and in small patches often on sites unsuitable for cultivation (e.g. in Iganga, Eastern Uganda). In western Uganda, from Mityana to Kabarole, and Masindi districts, settlement pressure is relatively low. This leaves extensive natural areas of often good quality closed forest and woodland.

The high rate of loss/degradation of un-gazetted forests and woodlands is due to land tenure systems that do not seem to favour conservation. The land tenure system in Uganda has undergone transformations since the colonial days, when various policies and laws relating to the ownership and management of land tended to favour individualization but without alienating the need for customary tenure. Traditionally, freehold and Mailo tenure systems were encouraged. After independence in 1962, the

Planning Act of 1964 related to orderly planning of urban and rural land use, and the Public Act 1969 provided for the protection of customary land rights. The Land Reform Decree of 1975 (during Amin's government), however, declared all land in Uganda to be public land vested in the Uganda Land Commission, abolishing freehold interests in land except where such interests were vested in the commission. As a result, all freehold land, including Mailo ownership, was converted to leaseholds. In the recent review, the Land Act of 1998 now recognizes four tenure systems in Uganda:

- Customary tenure: a system of land tenure regulated by customary rules which are limited in their operation to a particular description or class of persons;
- Freehold land tenure system: the holding of registered land in perpetuity subject to statutory and common law qualifications;
- Mailo tenure system: the holding of registered land in perpetuity and having roots in the allotment of land pursuant to the 1900 Uganda Agreement and subject to statutory qualifications;
- Leasehold land tenure system: holding of land for a given period from a specified date of commencement, on such terms and conditions as may be agreed upon by the lessor and lessee.

Land under the Mailo or the freehold systems, because of security of tenure, may encourage conservation depending on the level of awareness and interest the owner has in environmental protection. The privately owned forests are better managed and are less threatened by degradation compared to other forms of un-gazetted forests (personal interviews, ECOTRUST). Leasehold arrangements may encourage maximum exploitation of the land during the period of tenure. The current owner is tempted to exploit the land to the maximum possible level without due consideration of sustainability since he is not sure of the continued future benefits of the land.

Most of the land in Uganda is under customary tenure, usually meaning communal utilization (Sebukeera and Turyatunga 2001). In some areas, particularly in the rangelands, there is often open access where no control is exercised in determining where, when or who utilizes wood or grazing resources. These 'open accesses' have been the areas where land degradation has occurred most. In this respect, the Land Act of 1998 is an improvement, to the extent that it allows for the formation of community land associations for the purpose of communal ownership and management of land. The Act also provides for the issuance of certificates of customary ownership. Such certificates confirm, and are conclusive evidence of, the customary rights and interests in such land.

Through the Land Act of 1998, the government has improved the ownership and management of land in the country. The need is to enforce the law. Although quite progressive, the hurried enactment of the law meant that some issues were overlooked and should be redressed. First, the law was formulated without an

accompanying land-use policy. Therefore, as Uganda is in the process of formulating a land-use policy, some aspects of the Land Act 1998 may have to be revised. Second, the law is weak in its provisions for equitable sharing of benefits of land ownership amongst family members. Hence the gender aspect of the law may have to be revisited.

The future of the un-gazetted forests is not as bad as it appears to be. Firstly, the Forestry Inspectorate Division (FID) is providing guidelines to SFM in all forest sectors and is encouraging private forest owners to register in order to protect their rights of use. The registration of the private forest owners is done under the National Forestry and Tree Planting Act (2003) on submission of acceptable management plans that support SFM (personal interviews, FID). Secondly, ECOTRUST, a local funding institution (not-for-profit trust fund) is supporting the conservation of biological diversity and alleviation of poverty through sustainable economic development activities. The financial support is provided to non-governmental organizations (international and national NGOs), community-based organizations, government institutions and other agencies involved in environmental management or conservation activities. ECOTRUST aims at promoting private land management for biodiversity conservation, noting that most biodiversity lies outside protected areas. The focus is on a set of incentives that should encourage private landowners to engage in forest conservation and carry out restoration activities. The market-based incentives that ECOTRUST advocates include carbon off-sets (still in early stages), promotion of nature-based enterprises (e.g. Apiary), and institutional capacity-building. As one of ECOTRUST's initiatives, the Bushenyi Carbon Project in southwestern Uganda helps smallholder subsistence farmers to gain access to the emerging carbon market while realizing other benefits of tree planting such as timber, fuel wood, fodder and fruit. In future, ECOTRUST will encourage and support certification of Non-Timber Forest Products such as honey (personal interviews, ECOTRUST). ECOTRUST also helps private forest managers develop management plans to promote Sustainable Forest Management.

Markets

In 1994, the government of Uganda instituted a ban on exportation of round wood timber (logs) because forest department inventories indicated there was not enough timber to export and sustainably manage the forests. Records show that most or all of the timber from forests is consumed locally. Tables 4 to 6 summarize forest production, exports, and imports.

Table 4 Total production in 2002

	Wood fuel (Mt) wood (Mt)	Indus. Round	Sawn wood (Mt)	Wood-based panels (Mt)	Pulp for paper (Mt) (Mt)	Paper and paperboard
Production	35,141,824	3,175,000	264,000	4,600	ND	3,000
Exports	ND	ND	113 (valued US\$38,000)	ND	ND	70 (valued US\$49,000)
Imports	ND	ND	649 (valued US\$94,000)	24 (valued US\$38,000)	ND	2538 (valued US\$1743)

Source: FAOSTAT

Table 5 Trends and current status of the contribution of the forest sector to national economy

Sector	Contribution
Forest sector (excluding furniture) employment as a percent of total work-force (2000)	0.0
Gross value added in forestry income (millions US\$) (2000)	86
Gross value added in forest sector (excluding furniture) (millions US\$) (2000)	120
Forest sector contribution to GDP (%) (Source: FAO)	2.2
Forest products export (excluding furniture) (Source: FAO)	Not significant
Forest products import (excluding furniture) (millions US\$) (Source: FAO)	18
Forest sector contribution to export (excluding furniture) (%) (Source: FAO)	Not significant
Forest sector contribution to import (excluding furniture) (%) (Source: FAO)	1.2

NOTE: All data are for 2000

Source: FAO 2003

Table 6 Trade of forest products showing the top ten Uganda trading partners (importers and exporters) in forest products (all data from 2001)

Importer of Uganda Forest Products	Value (in US\$1000s)
Congo, Dem Republic	4
Switzerland	8
Netherlands	9
Ireland	10
Sudan	13
Germany	16
Canada	23
Denmark	25
Congo, Republic of	32
Rwanda	442
Exporter of Forest Products to Uganda	
United Arab Emirates	376
Netherlands	403
Finland	439
Indonesia	551
France	619
Germany	691
Belgium	696
China	703
Sweden	1,171
Kenya	11,148

Source: <http://faostat.fao.org/default.jsp>

THE EMERGENCE OF FOREST CERTIFICATION

Initial Support

The initial support to forest certification in Uganda was by foreign actors who came in to assist the government of Uganda to rehabilitate its forest estate after a decade of political upheaval. The unsustainable management of the forest estates during the 1970s to early 1980s was a major concern that led to drastic reforms to reverse the negative trends. Most of the protected areas were encroached on for expansion of agricultural land, poaching for wild meat, and excessive harvesting of various resources. The impact was great, as species such as the white rhino became extinct in the wild, populations of other large mammals (e.g. elephants) greatly reduced, and forests were highly degraded. Illegal logging led to removal of the most valuable tree species.

The National Resistance Movement government that came into power in 1986 embarked on the rehabilitation of Protected Areas mainly with donor funding. The government invited IUCN, the European Community, and later FACE Foundation (Forest Absorbing Carbon-dioxide Emissions) to undertake restoration work. In

1994, FACE Foundation formally started its operations with Uganda National Parks as its contract partner under the UNFCCC Clean Development Mechanism (CDM). The FACE Foundation is a non-profit organization established by SEP, the Dutch Electricity Generating Board, with the objective of creating long-term stable stores for carbon in the form of regenerating forests. FACE aims to establish enough forests to offset the emissions from one 600MW power station in the Netherlands. Through FACE, SEP has funded projects in Czech Republic, the Netherlands, Ecuador, Malaysia, and Uganda.

In Uganda, the FACE project carried out enrichment planting in formerly encroached forests of Mount Elgon and Kibale National Parks. The rehabilitation of degraded forest came along with upgrading the two Forest Reserves to National Park status, a higher level of protection, institutional reforms leading to enactment of revised laws, new policies and statutes, formation of the Uganda Wildlife Authority and the National Forest Authority, and certification of parts of the forest estates in Mount Elgon and Kibale National Parks.

Mount Elgon National Park is located in eastern Uganda (between 0°52' and 1°25'N to 34°14' and 34°44'E) covering 1145 km². The altitudinal range is 1460 to 4320 m above sea level. During the political upheaval between 1970-1985, Mt. Elgon National Park was subjected to agricultural encroachment that resulted in the destruction of 25 hectares of prime high montane forest between 2000-3000 m. Pit-sawing and shifting cultivation reduced the dense forested lower slopes to bare landscapes and its water catchment status severely eroded. The degraded 25 ha of the forest estate were targeted for rehabilitation and, quite recently, forest certification under the Forest Stewardship Council (FSC) principles.

The Kibale National Park covers 560 km² in western Uganda (between 0°12' and 0°40'N to 30°20' and 30°35'E). The altitudinal range is 1110 to 1590 m above sea level. About 23 percent comprises grassland and swamps that are targets for the replanting program by the UWA-FACE project. The UWA-FACE project is working exclusively in the restoration zone, which covers an approximate area of 10 hectares, the area certified for carbon sequestration.

The process of certification in the forest sector of Uganda is in the initial stages and few people in the sector have undertaken training in forest certification. The UWA-FACE project provided the initial support to Mt. Elgon and Kibale National Parks' reforestation project sites, which were certified in March 2002 (SGS Forestry 2002). As a way of assessing operations against the requirements of the SGS QUALIFOR certification programme, the UWA-FACE project sought the services of the SGS group's forest certification program accredited by the Forest Stewardship Council (FSC). The project sought FSC certification of their activities in the two parks as evidence of the quality of their activities. The certifiers visited in 1999, 2000, and 2002 before certificates were issued for the sites. In the current arrangement, local communities benefit from the park through employment and collection of fuel wood and grass.

The Busoga Forest Company, owned by a Norwegian company, is to plant about 100,000 ha of trees and has shown interest in forest certification (personal interviews, FORRI).

Within the East African region, the East African Forest Certification Initiative (EAFICI) was started and aims at supporting capacity-building for forest certification in seven countries of Eastern Africa, namely: Eritrea, Ethiopia, Kenya, Somalia, Sudan, Tanzania and Uganda (personal interviews, FORRI). The objective of the initiative is to facilitate, analyze and document a process by which stakeholders formulate and agree on a regional capacity-building strategy in forest certification based on FSC principles and criteria.

The first regional workshop was held in May 2002 in Kenya, where a regional focal point institution (ELCI) was selected to coordinate the development work. In addition, national focal points were identified. Forestry Resources Research Institute (FORRI) was selected as the Ugandan representative. The second regional workshop was organized in November 2002 to adopt a draft governance structure for the initiative and begin training in forest certification based on sustainable forest management. It was agreed that the national level stakeholders are contacted and sensitized on strengths and challenges of forest certification. The development process is required to be participatory and transparent in each country. This initiative is implemented by the International Agriculture Center (IAC), Deutsche Gesellschaft für Technische Zusammenarbeit (GTZ), and ETC East Africa. The German government, Department for International Development (DFID) and European Commission (EC) are the financiers of the initiative. Uganda stands to benefit from this regional initiative through building capacity in forest certification that is largely lacking. A logical framework for forest certification capacity-building strategy in the Eastern African region was adopted for a period of one year in the November 2002 workshop. Participants in these workshops who were supportive of this initiative included various forest stakeholders in the region including government, industrialists, academicians, and non-government organizations.

Institutional Design

In 1999, the government of Uganda launched a forest sector reform process, which resulted in the development of the National Forest Policy (2001), the National Forest Plan (2002), and the National Forestry and Tree Planting Act (2003). A new institutional framework was created with clear roles and responsibilities for central and local agencies, the private sector, civil society and local communities. The arrangement aims at promoting efficient and effective governance of the sector. A key part of this new institutional framework is the Forest Inspection Division (FID) in the Ministry of Water, Lands and Environment. The Forest Inspection Division's role is set out in the National Forest Plan, and its capacity is being strengthened to oversee forest sector development.

The vision of the forest sector in Uganda is “a sufficiently forested, ecologically prosperous Uganda.” The Mission of the FID is “to effectively co-ordinate, guide and supervise Uganda’s forest sector, and contribute to the rational and sustainable utilization, development, effective management, safeguard of forestry resources, for social welfare and economic development.” The functions of FID contribute to the achievement of the national goal of “an integrated forest sector that achieves

sustainable increases in the economic, social and environmental benefits from forests and trees by the people of Uganda, especially the poor and vulnerable.”

The core responsibilities of the FID are: 1) to formulate and oversee forestry policies, standards and legislation; 2) to monitor the National Forestry Authority (NFA) using a performance contract; 3) to provide technical support and monitor district forestry services; 4) to support forestry advisory services under National Agricultural Advisory Services (NAADS); 5) to promote information, advice and advocacy to sector stakeholders; 6) to ensure effective National Forest Plan (NFP) co-ordination and cross-sectoral linkages; and 7) to raise funds and other resources for the forest sector.

Standards

The aim of Uganda’s National Forest Plan is to guide all forest-related activities and development of management plans for specific forest management units. The plan was developed through a participatory process where all major stakeholders contributed. It is geared to Sustainable Forest Management. The management plans developed from the National Forest Plan need to be improved in relation to the Forest Certification Framework.

The current silvicultural and harvesting guidelines and the related productive operations are to a great extent compatible with the requirements of SFM. Most forest reserves have got management plans and there is documentation of the activities undertaken. An existing gap in current management plans is the lack of instruction about controlling adverse environmental impacts of forest operations such as water and soil (e.g. erosion control), minimization of harvesting damages, road construction, and disposal of wastes (e.g. chemicals). (Uganda FRMCP 2004; Forest Department 2003).

The current monitoring and reporting systems focus on the operations carried out, timber harvested and processed, and costs and revenues. Monitoring of growth rates, regeneration and conditions of the forest, composition and changes in the flora and fauna, and environmental and social impacts of harvesting and other operations are lacking. Monitoring is necessary to show that the operations are in accordance with the management plan and that the environmental and social impacts are acceptable.

Forest certification in the two sites in Uganda is based on sustainable forestry standards derived partly from the ten FSC principles and criteria, as well as locally applicable standards developed in consultation with stakeholders and local professionals. The standards include the following: 1) security of tenure, use rights and responsibilities; 2) indigenous peoples’ rights; 3) community relations and workers’ rights; 4) benefits from the forests; 5) environmental impacts; 6) management plan; and 7) maintenance of high conservation value forests.

There is also a concerted effort to develop national forest management guidelines for forest certification, and labeling of forest products with short-term technical assistance from INDUFOR under the Uganda Forest Resources Management and Conservation Programme (Uganda FRMCP 2004). The objectives of the initiative are

to explore concrete possibilities for placing Uganda on the path to Sustainable Forest Management (SFM) using the certification approach and to assess other emerging international processes that will be beneficial to Uganda and that have links with the certification approach to SFM. The approach involves developing a national standard for SFM in a participatory process, and in cooperation with the East African Forest Certification Initiative, and improving the current forest management systems to be consistent with the concept of economic, ecological and social sustainability. Development of standards for SFM (the standard-setting procedures and implementation arrangements) will follow the procedures of FSC in line with the ten FSC principles.

The NFA is preparing a draft of the national standards to be debated and discussed with various stakeholders before adoption (personal interview, NFA). The standards will apply to all Central Forest Reserves and all plantations under the NFA jurisdiction. Individuals and institutions with licenses to carry out activities under the mandate of NFA will be obliged to follow the national standards.

THE REACTION TO CERTIFICATION

Forest Policy Community and Stakeholders

Uganda recently reviewed its national forest programs with considerable emphasis given to the adoption of SFM approaches and has, in principle, committed itself to the transition from the current status of forest management to SFM according to the FSC.

A new forest policy was launched in 2001. The NFA and FID plan is to develop intensive sensitization strategies in support of forest certification to complement development of national standards in line with forest certification procedures (personal interviews, NFA; personal interviews, FID). These developments are under the influence of local and regional certification initiatives, following the FSC principles, and general global trends.

The UWA is in full support of certification in the two national parks (Mt. Elgon and Kibale). UWA leased the planted forests to the FACE Foundation for a period of 99 years, under which they are to be left intact. It is planned that forest certification for carbon sequestration will be expanded to cover the whole of the Mt. Elgon and Kibale forests. This is because of the success of certification of planted sites of the forest that has been realized. It is logical to certify the whole and not just part of the forest estate in order to benefit from the current carbon markets.

The Uganda Forestry Association (UFA) and the Uganda Wood Farmers Association (UWFA) advocate for SFM strategies and are supportive of Forest Certification initiatives (personal interviews, UFA; personal interviews, Uganda Wood Farmers Association). In principle, UWFA embraces forest certification because it promotes product quality and SFM. Wood farmers in Uganda are interested in short term returns and therefore plant *Eucalyptus* spp. for small poles harvested in 2 to 3 years that are in demand for the construction industry. Few

farmers have plantations for production of timber or big poles for electricity distribution lines. Until recently, most of the coniferous plantation timber was not recognized in the construction and furniture industry. Coupled with the fact that this is a new concept, it will take up to five years for wood farmers to be actively involved in forest certification initiatives. Preference for FSC is mainly because it is the only forest-certifying agency in the country.

The saw millers (personal interviews) support SFM, as this would sustain their businesses. However, the majority of saw millers do not understand the concept. The few who understand it are those that have participated in the East African Forest Certification Initiatives.

Through key informant interviews, big consumers of wood (e.g. construction companies such as Excel and ROKO) were supportive of certification initiatives and expressed willingness to buy certified timber on the local markets. Small-scale consumers, however, are unfamiliar with forest certification. Sensitization is needed to explore this potential market for certified timber. The World Conservation Union (IUCN) supports SFM globally and appreciates the Forest Certification Initiatives (personal interviews, IUCN).

Forest Owners

A big concern in terms of ownership is the 70 percent of the forests outside the Permanent Forest Estate (in the Traditional Protected Areas). These forests are on communal land or are privately owned by individuals. The FID, under its mandate, registers private forest owners to safeguard their rights. The registration covers communal forests, forests owned by institutions, and individually owned forests. Before any forest is registered, an acceptable management plan supporting SFM has to be developed and submitted. So far, ten community forests are registered under this scheme from the Masindi District, but still a lot has to be done to sensitize the communities (personal interviews, FID). The FID encourages communities to form associations and asks that individuals with forests on their land register them as either communal or private. The FID will provide guidelines for the development of management plans and plans to sensitize such forest owners about forest certification if funds are available.

Current Status of Forest Certification

The concept of forest certification is still new to most forest stakeholders in Uganda. Only modest attempts at forest certification have been made so far. However, the wave of certification is generally moving very fast in the country and various sectors have been certified according to ISO 9002 standards by Société Général de Surveillance (SGS) certifiers. Among these are manufacturers such as Rwenzori Water, Uganda Bati, Uganda Batteries, and the brewery industry.

Kibale and Mt. Elgon National Parks are the only sites where forest certification audits have been completed in Uganda under FSC. The UWA-FACE project is integrated into UWA, and the scope of the certificates will be expanded to cover

whole parks as it is not permitted to certify only part of a forest management unit (personal interviews, Mt. Elgon NP, UWA-FACE project). At the time UWA signed agreements to lease out part of the forests of these two national parks, benefits accruing from the sale of carbon credits had not been known or anticipated (personal interviews, UWA). The project sites in the two national parks are leased to the FACE Foundation for 99 years, and for any carbon credit schemes, it is the FACE Foundation that benefits. There are plans for UWA to re-negotiate the terms as it is envisaged that the whole and not part of the forests will be certified for carbon offsets.

In addition to the UWA-FACE project sites already certified, Tree Farms (a Norwegian company) established itself in Uganda in 1996 and has an afforestation project in the Bukaleba Reserve under its subsidiary's name of Busoga Forestry Company Ltd. The project is setting up between 80,000 and 100,000 hectares of plantations of pines (*P. caribaea*, *P. oocarpa* and *P. tecunumani*) and Eucalyptus (*E. grandis*). The Busoga Forest Company has expressed interest in forest certification for purposes of trading in carbon. However, the eviction of some 8,000 people from 13 villages, mainly farmers and fishermen, from their land that the company now occupies created social and environmental conflicts which are yet to be resolved (World Rainforest Movement 2000). This has hindered the certification process.

The Faculty of Forestry and Nature Conservation at Makerere University (FFNC) is considering developing a curriculum to cover forest certification. This follows the East African Forest Certification Initiatives towards building capacity in order to promote forest certification in the forest sector (personal interviews, FFNC).

Large timber sawmills such as Nileply appreciate the concept of forest certification (personal interviews, Nile Plywoods Uganda Ltd.). They are willing to certify their products in order to explore the export markets. However, they have no plans to do so in the near future. It is highly probable that, because of locally available markets for their products, there has not been a need to incur costs of certification of their products, let alone the forest plantations for carbon sequestration. The main challenge remains to convince the private (community, organizations, and individuals) owners of forests and plantations to practice forest certification.

Current Status of the Certified Marketplace

The current status of the certified marketplace for forestry products in Uganda is that the market is not yet developed but is slowly evolving. The market for Certified Emission Reductions (CER) for forestry projects under the Clean Development Mechanism (CDM) has great potential since the guidelines for forestry projects were approved in the 10th Conference of Parties that took place in December 2004. A number of tree farmers have expressed interest in the tapping into the carbon market and will therefore have to follow guidelines under the CDM in order to produce CERs.

EFFECTS OF CERTIFICATION

Whereas forest certification in Uganda is for carbon sequestration under the auspices of an international organization collaborating with the UWA, it has had some impact on the trend towards sustainable management of forests in the country.

Power

The NFA, in collaboration with the FID, is developing national standards based on the FSC principles and criteria that were adopted by the FACE project in the certification of project sites in Uganda. It has therefore had a certain level of influence on government agencies in the development of policies and laws to support sustainable forest management programs.

Social

Following the gazettement of the forests into national parks, local communities lost all rights of access to forest resources. The only way that use can be re-established is through the signing of formal agreements with park management, under Collaborative Resource Management Agreements (CRMA). The local communities negotiate with park management and other UWA staff (including the UWA-FACE project staff) to agree on the type and quantity of the resource they wish to extract from the park. Examples in the Mt. Elgon area include the Kapkwai Collaborative Resource Management Agreement where UWA-FACE plantations are included within the scope of the agreement. Through the CRMA, local communities access park resources sustainably. In some places, permits are issued to raise annual crops amongst young trees, 'Taungya style,' further increasing the incentive to protect the sites from fire.

Workers and farmers in project sites receive training in nursery practices, and establishment and nursery management of trees. The knowledge is replicated in raising coffee seedlings, which is of value given the demand for coffee bushes in the area. Wild and cultivated coffee is a major economic crop in the Mt. Elgon area. Many farmers grow it on their smallholdings and others collect it from the park. There are no coffee bushes growing in the encroached areas. The farmers have gained skills and knowledge to establish woodlots.

Many cultural sites exist in the national parks. Only a few occur in the certified forest areas. These include salt licks, caves and big rocks. Access to these sites remains a customary right.

Other social benefits are indirect. For example, UWA-FACE workers are entitled to medical care and other benefits laid out in the UWA-FACE project Terms and Conditions of Service.

Economic

UWA-FACE is widely recognized as one of the few significant sources of income in the project sites. In Mt. Elgon alone, a permanent labor force of approximately 250

workers is employed, and during peak seasons, an additional 1,000 casual laborers are employed. UWA-FACE project now purchases seedlings from community-based nurseries. Villagers have been offered the opportunity to raise seedlings and sell them to the UWA-FACE project. The inflow of cash into communities has enabled project employees to improve their standards of living. The forest resource that the project will exploit is carbon sequestration. To date this resource is relatively small as the trees are still small. As the trees mature and the degraded lands are transformed into a long-term stable store of carbon, the benefits will increase.

Environmental

Carbon will be sold without being ‘harvested’. The project is re-planting native species in order to recreate a stable long-term store of carbon and restore the forest’s ecological functions. The establishment of natural forest has the impact of enlarging the habitat for native species, protecting the park’s biodiversity and enhancing its tourism value.

Tourism is an important source of income for the southwestern region of Uganda, with local groups facilitating access to the tourism sites. Kibale National Park is rich in biodiversity, and in the neighbourhood is an NGO, the Kibale Association for Rural Development (KAFRED) promoting and managing the Bigodi Wetland Sanctuary. The area is rich in primates and over 370 species of birds. However, the presence of rebels from the D. R. Congo in the forests has previously had adverse impacts on visitor numbers.

There is support for community development activities, initiated and implemented through the Kibale-Semliki Conservation Development Programme (KSCDP) around the Kibale National Park. The activities include a building program for schools and provision of culverts for road drainage, training in bee keeping, soil stabilization, pig farming, and fruit tree cultivation. The KSCDP project is to be integrated into UWA activities. The Mt. Elgon region ecosystem program funded by DANIDA is in the offing and aims at supporting farmers around Mt. Elgon in several aspects of conservation to improve community livelihoods and reduce human-natural resource use conflicts.

CONCLUSION

Summary

The case study has highlighted Uganda’s forest sector in relation to sustainable forest management and forest certification initiatives. Forest certification in Uganda and the East African region was initiated by external drivers, with governments playing limited roles. Discussions with government agencies indicate that the present funding mechanisms do not provide a sustainable basis for forest management in state-owned Forest Reserves. It is important that the Central Forest Reserves are provided with sufficient financial resources to facilitate forest management operations.

The concept of forest certification is new in Uganda. Intensive sensitization campaigns are required for the concept to gain root. The response by the government has been positive by putting in place legislation in support of sustainable forest management and strengthening management of forests through institutional reforms. The government of Uganda could also take advantage of the East African Forest Certification initiatives to build the necessary capacity in forest certification.

The two carbon offset projects in Uganda operate in national parks, which are managed under the wildlife statute and are protected permanent forest estates. Under the collaborative management memoranda signed with the park authorities, local communities have some limited access to natural resources in all national parks. Access to the resources therefore is not exclusive to the forest certification process.

Employment opportunities, skills in tree nursery operations, and incomes generated from the sale of seedlings to the UWA-FACE project are incidental benefits that resulted from the need to restore the degraded forests. The certification serves to demonstrate to FACE, UWA, and other parties that the parks are well managed. The fact that local communities have opportunities for employment and alternative sources of income (from sale of seedlings) has greatly reduced conflicts between encroachers and national parks. It is envisaged that in the next phase of certification farmers will benefit directly from the forest certification process.

Roadblocks and Challenges

As the National Forest Authority (NFA) strives to develop national standards that support Sustainable Forest Management (SFM) and forest certification, the following challenges need to be overcome:

- designing Ugandan forest certification standards that are friendly and applicable to local situations;
- resolving conflicts between local communities bordering forest reserves. This is a big problem in areas where the local people have expanded their land holdings into forest reserves due to unclear boundaries;
- establishing and embracing standards that may take care of a multiplicity of forest outputs since Uganda's natural forests are ecologically diverse and socially important;
- reconciling with environmentalists, given that their thinking is deeply rooted in social and ecological effects. Furthermore, there is a need to take care of the diverse interests of different actors;
- overcoming weak institutions. In the past, the Forest Department suffered the lack of stewardship, institutional support, a lack of public accountability, corruption among forest officers, and over-reliance on external support. It is necessary to ascertain how these historical issues impede certified forests and the process of certification. The challenge is that many old faces in the Forest Department appear in the NFA;

- forestry is mainly foreign-funded. It is necessary to know the commitment of donors to this new forest management practice.

Future Developments/Scenarios

The government should institutionalize forest certification in government and non-government agencies. A regulatory framework should be put in place by government, but driven by the private sector, in order to minimize funding shortfalls.

There is a need for increased awareness and sensitization among management agencies, consumers and service providers. The government should take advantage of the East African Forest Certification Initiative (EAFICI) to build capacity for forest certification. Management agencies that should be targeted include government institutions and parastatals at different levels, and private forest owners. The service providers comprise training institutions, research institutions, and NGOs.

Since there will be a timber shortfall within 5 to 10 years, forest certification should be expanded to cover forest timber products, and non-timber products other than carbon sequestration. Uganda exports floor parquets mainly to China, and reasonable quantities of honey harvested from forests are processed and consumed locally and internationally.

Forest certification has not focused on forest services such as eco-tourism that are very important regarding forests in Uganda. The big populations of mountain gorillas and chimpanzees are some of the most important fauna in Uganda's forests. Water catchment is another important role of the forests. It is high time that such services are recognized in FSC to support SFM for such vulnerable ecosystems.

Cross border conservation initiatives, as in the case with Mt. Elgon National Park, should take advantage of certification of forest ecosystems lying across borders.

Future Research

There is a need for a comprehensive pilot study to generate information on forest certification potential. Such a study would focus on the impacts of local and international markets for certified forest products, local capacity and awareness of the stakeholders.

Research is also required on the net impact of forest certification in relation to the principles of Sustainable Forest Management (SFM) in Uganda and the effectiveness of the government institutional framework for SFM. Protocols for sharing benefits from certification need to be investigated and adapted to the local context.

REFERENCES

- FAO 2003. Trends and Current Status of the Contribution of the Forest Sector to National Economies. Final Draft. Rome, Italy.
- FAOSTAT 2002. FAO Statistical Databases.
- Forest Department. 2003. Proceedings of the National Stakeholders Workshop on development of guidelines for forest certification and labeling of forest products. April 2003.
- Forest Produce Monitoring Unit. 2002. Forest Department Records, Kampala, Uganda.
- Howard P.C. 1991. Nature Conservation in Uganda's Tropical Forest Reserves. IUCN, Gland, Switzerland.
- MWLE (Ministry of Water, Lands and Environment). 2004. Guidelines for accessing grants under the sawlog production scheme. Republic of Uganda.
- Moyini, Y. 2001. The role of forests in Uganda's national economy. In: Emerton, L. & Karanja, F. (eds), Valuation of forest resources in East Africa. *Innovation*, Vol. 8.: 10-12.
- Mupada, E., 1997. Towards collaborative forest management in the conservation of Uganda's rain forests. In: Sean Doolan (ed.), *African Rain Forests and the Conservation of Biodiversity*. Proceedings of the Limbe conference. Royal Botanical Gardens Kew and Mount Cameroon Project.
- Nabanyumya, R. and W. Kakuru. 1996. The Protection of Un-Gazetted Forests: The Case of Uganda. UNO/RAF/GEF Field Document 22. FAO Kampala, Uganda.
- National Biomass Study Report. 1995. Forest Development Records. Kampala, Uganda.
- Plumptre, A.J. 1996. Changes following 60 years of selective timber harvesting in the Budungo Forest Reserve, Uganda. *Forest Ecology and Management*. 89: 101-113.
- Plumptre, A.J. and Reynolds, V. 1994. The effect of selective logging on the primate populations in the Budungo Forest Reserve, Uganda. *Journal of Applied Ecology* 31: 631-641.
- Pomeroy, D., and Mwima, P. 2002. The State of Uganda's Biodiversity 2002. Makerere University Institute of Environment and Natural Resources.
- Sebukeera, C., and Turyatunga, F., (eds.). 2001. State of Environment Report for Uganda 2000/2001. National Environment Management Authority (NEMA).
- SGS Forestry. 2002. Kibale National Park. Main assessment report. www.sgsqualifor.com/fmr.htm
- SGS Forestry. 2002. Mt Elgon National Park. Main assessment report. www.sgsqualifor.com/fmr.htm.
- Uganda Forest Policy. 2001. Ministry of Water, Lands and Environment.
- Uganda FRMCP – Forest Resources Management and Conservation Programme. 2004. Development of forest management guidelines for forest certification and labeling of forest products. INDUFOR.
- World Rainforest Movement. 2000. Uganda: Carbon Sinks and Norwegian CO₂ Colonialism. Bulletin No. 35. www.wrm.org.uy/bulletin/35/uganda.html.

LIST OF ORGANIZATIONS CONSULTED

Organization	Date	Location
Environmental Conservation Trust of Uganda (ECOTRUST)	17 th March 2004	Kampala, Uganda
Forest Resources Management and Conservation Programme (FRMCP)	7 th May 2004	Kampala, Uganda
Forestry Department (FD)	5 th March 2004	Kampala, Uganda
Forestry Resources Research Institute (FORRI)	17 th March 2004	Kampala, Uganda
Makerere University, Faculty of Forestry and Nature Conservation (FFNC)	1 st March 2004	Kampala, Uganda
Ministry of Water, Lands and Environment	11 th May 2004	Kampala, Uganda
National Forestry Authority (NFA)	3 rd May 2004	Kampala, Uganda
Nile Plywoods (U) Ltd	7 th May 2004	Jinja, Uganda
Saw millers	6 th May 2004	Kampala, Uganda
The World Conservation Union (IUCN)	1 st June 2004	Kampala, Uganda
Uganda Forestry Association (UFA)	2 nd June 2004	Kampala, Uganda
Uganda Tree Farmers Association (UTFA)	2 nd June 2004	Kampala, Uganda
Uganda Wildlife Authority (UWA)	6 th April 2004	Kampala, Uganda
Uganda Wildlife Authority-FACE Project (UWA-FACE)	13 th April 2004	Mbale, Uganda

ACRONYMS

AFM	Area Forest Manager
CERs	Certified Emission Reductions
CRMA	Collaborative Resource Management Agreement
DANIDA	Danish International Development Agency
DFID	United Kingdom's Department for International Development
DFO	District Forest Officer
EC	European Commission
ECOTRUST	The Environmental Conservation Trust of Uganda
ELCI	Environmental Liaison Centre International
ETC East Africa	Subsidiary of ETC Netherlands, Leusden (ETC Group)
EU	European Union
FACE	Forests Absorbing Carbon dioxide Emissions
FD	Forest Department
FID	Forestry Inspectorate Division
FORRI	Forestry Resources Research Institute
FRMCP	Forest Resources Management and Conservation Programme
FSC	Forest Stewardship Council
GTZ	Deutsche Gesellschaft für Technische Zusammenarbeit
IAC	International Agriculture Center
IUCN	The World Conservation Union
KAFRED	Kibale Association for Rural Development
KSCDP	Kibale-Semliki Conservation Development Programme
NAADS	National Agricultural Advisory Services
NFA	National Forest Authority
NGO	Non-Governmental Organization
PA	Protected Area
PFE	Permanent Forest Estate
SGS QUALIFOR	Forest management certification programme (an internationally recognized mark of quality forestry)
SFM	Sustainable Forest Management
SGS	Société Générale de Surveillance
THF	Tropical High Forest
TPA	Totally Protected Area
UNFCCC	United Nations Framework Convention on Climate Change
UWA	Uganda Wildlife Authority
WRM	World Rainforest Movement
WWF	World Wide Fund for Nature

