

Forestry Series 5



MAINTAINING AND EXPANDING A PERMANENT PROTECTED FOREST ESTATE IN UGANDA

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I. INTRODUCTION

The Permanent Forest Estate (PFE) in Uganda consists of 1.9 million hectares of central and local forest reserves and all forests in national parks and wildlife reserves. Although the Uganda Forestry Policy (2001) identifies its maintenance and expansion as a key issue and lays out strategies to achieve this under Policy Statement 1, the PFE in Uganda presently faces enormous challenges that call into question its very practicability. Encroachment as a result of population growth, degazettement and change of land use, lack of or outdated management plans, and poor timber harvesting methods are some of the challenges that plague the PFE in Uganda.

Conversely, recent legal and institutional reforms present ample opportunities for improved management of the forestry sector. The National Forestry and Tree Planting Act was passed in 2003 and the National Forest Authority (NFA) assumed its mandate in 2004. However, these opportunities are unlikely to bear fruit unless they are bolstered by measures specifically designed to ensure the sustainability of a PFE.

Uganda's forest estate serves to conserve biodiversity, protect environmental services and provide raw material for domestic and commercial forest produce. Therefore, it currently offers vast socio-economic and ecological values to rural and urban dwellers - from providing the largest source of household energy and the primary source of raw material and employment for wood-based small scale industries, to supplementing rural household diets and providing vital water quality and supply services.

Benefits from Uganda's Forests and Trees

- Agricultural support and environmental services.
- Income from employment, sale of forest products and tourism.
- Fuelwood energy.
- Construction, food and medicinal products, especially for sustenance of rural livelihoods.
- Sanctuary for traditional cultural, spiritual and religious rites.

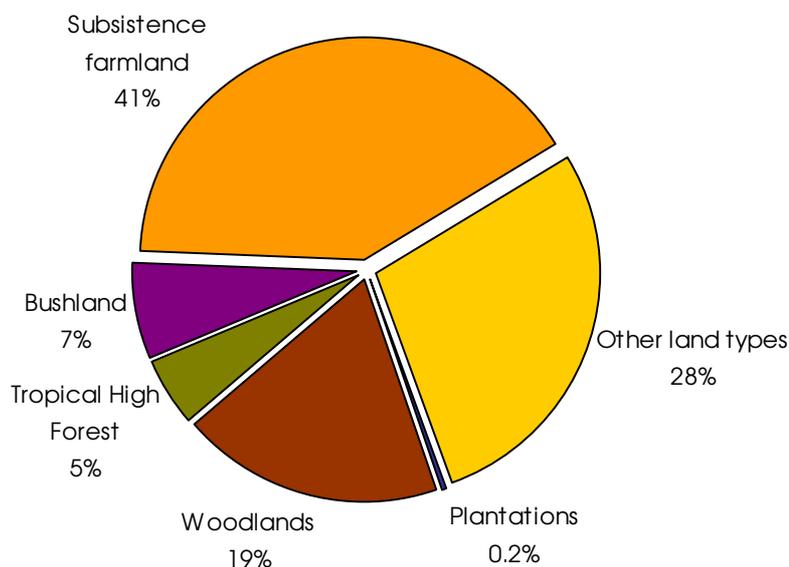
This report is the first in a series of activities that are intended to exercise the right of East African citizens under the East African Community (EAC) Memorandum of Understanding on the Environment. Together with its partners, the Lawyers Environment Action Team (LEAT) in Tanzania and the Kenya Forests Working Group (KFWG) in Kenya, the Uganda Wildlife Society (UWS) will attempt to convince the EAC to declare and put in place measures to maintain and expand the current forest estate in East Africa.

II. THE CURRENT STATE OF UGANDA'S PROTECTED FOREST ESTATE

The Uganda Forestry Policy (2001) identifies the maintenance and enhancement of the PFE as a key issue. This is due to the fact that, although Uganda earned an international reputation for good forestry management prior to 1970, this reputation was largely reversed by the political and economic strife in the subsequent two decades. As a result, the PFE was poorly managed and heavily encroached on by both previously evicted and landless communities, as well as opportunistic individuals and corporate entities seeking economic gain. It was not until the late 1990s when legal and institutional reforms were being introduced that the scale of forest degradation became better understood and efforts to curb it better organised.

According to the National Biomass Study published in 1999 to facilitate and guide reforms in the forestry sector, forests and woodlands cover almost 5 million hectares (24%) of Uganda's land surface. Of this, approximately 4 million hectares (80%) is woodland and the rest is predominantly tropical high forest and a little bit of forestry plantations (Figure 1). Of the 5 million hectares of the abovementioned forest and woodland cover in Uganda, 1.9 million hectares is located in the PFE: about 1.2 million hectares in forest reserves and 0.7 million hectares in national parks and wildlife reserves.

Figure 1: Forest Cover on Uganda's Land Surface



Source: Forestry Department, 2002

Unfortunately, only 64% of the forest reserves have forest cover (Table 1). Of this forest cover, woodlands occupy about 56%, tropical high forests about 41%,

and plantations about 3%. Although the NFA has recently made efforts to replant degraded plantations in central forest reserves, large tracts of central and local forest reserves remain unforested.

Table 1: Approximate Areas (in hectares) of Various Forest Types Under Different Categories of Ownership and Management

Forest Type	Permanent Forest Estate (ha)		Private & Customary Land	Total
	Central & Local Forest Reserves	National Parks & Wildlife Reserves		
Tropical High Forest	306,000	267,000	351,000	924,000
Woodlands	411,000	462,000	3,102,000	3,975,000
Plantations	20,000	2,000	11,000	33,000
Total Forest	737,000	731,000	3,464,000	4,932,000
Other cover types	414,000	1,167,000	13,901,000	15,482,000
Total Land	1,151,000	1,898,000	17,365,000	20,414,000

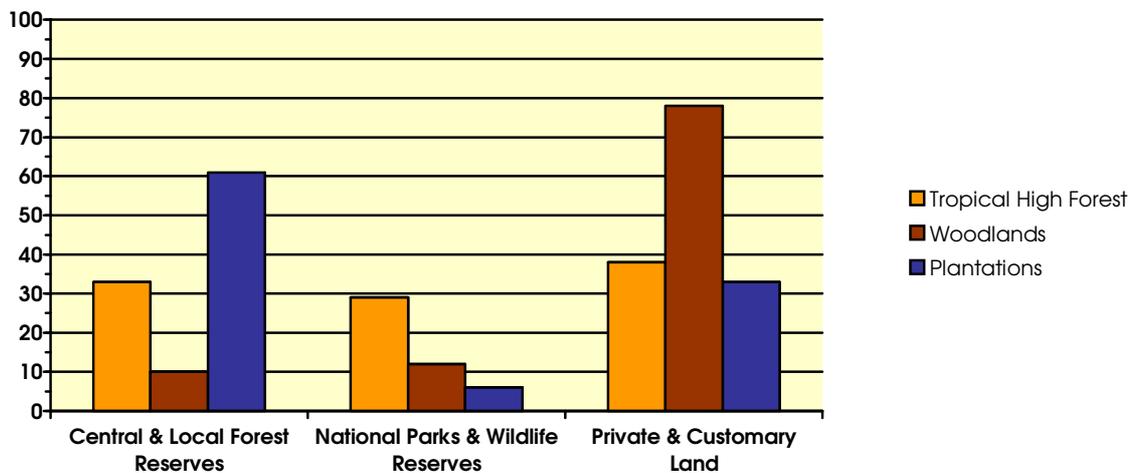
Source: Forestry Department, 2002

On the other hand, national parks and wildlife reserves, from which hardly any commercial timber is harvested due to legal restrictions associated with their status, have 38% forest cover (Table 1). This forest cover is composed of woodland (63%) typically found in most savannah parks and reserves, tropical high forest (37%) that is common in highland national parks, as well as a very small number of softwood plantations.

Approximately 20% of private and customary land is forested (Table 1). This amounts to almost 70% of Uganda's total forest cover. Woodlands make up the largest (90%) type of forest cover on private and customary land, while the remainder is mostly tropical high forest (10%) and very small (0.3%) area of softwood plantations. Forest clearance rates are currently highest on private and customary land.

The size of the tropical high forest estate in central and local forest reserves is relatively similar to that in national parks and wildlife reserves and on private and customary land (Figure 2). Unfortunately, as with other forest covers, tropical high forest cover is being degraded and lost at a fast rate. One third, almost 300,000 hectares, of tropical high forest in the country is degraded (MWLE, 2001b).

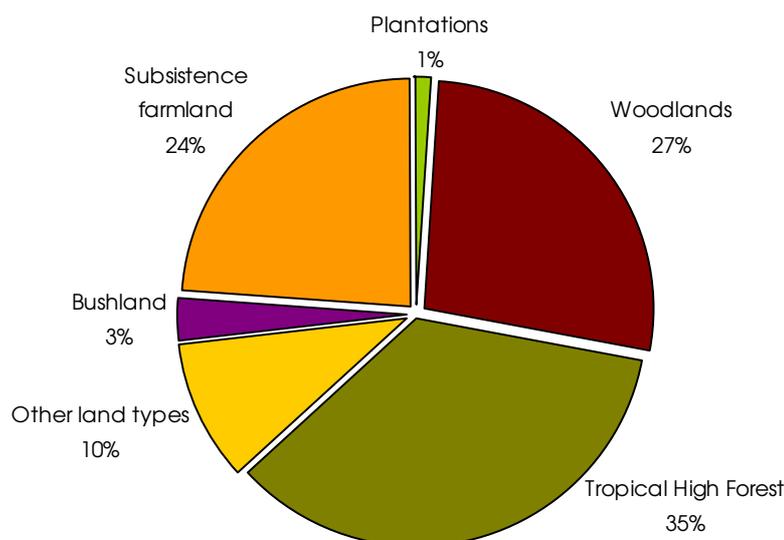
Figure 2: Location of various forest types in Uganda as a percentage



Source: Forestry Department, 1999

Harvesting and change in land use for agricultural purposes in tropical high forests on private and customary land is of particular concern. This is because, whereas harvesting of timber in central forest reserves is regulated and that in national parks is prohibited, harvesting and change of land use on private and customary land is unregulated and difficult to monitor or influence. Timber harvesting offers the most lucrative economic benefit to private owners of tropical high forests. Therefore, and disturbingly, as the tropical high forests on private and customary land become more degraded, the land and timber pressures on similar forests in the protected forest estate are likely to increase.

Figure 3: Biomass in Uganda



Source: MWLE, 2001a

However, although tropical high forests cover 5% of Uganda's land surface, they possess 35% of the biomass in the country (Figure 3) and produce a net growth of 15 tonnes of wood per hectare every year (MWLE, 2001a). It is expected that tropical high forests, the majority of which are located in western and central Uganda (Table 2), will continue to decline for the foreseeable future (Table 3).

Table 2: Forest Distribution (in hectares) by Region

Forest Type	Eastern	Central	Western	Northern	Total
Hardwoods	4,856	4,370	6,827	2,628	18,682
Conifer Plantations	2,140	2,746	8,259	3,238	16,384
Tropical High Forest (intact)	29,987	136,874	481,830	1,458	650,150
Tropical High Forest (depleted)	48,868	134,177	91,007	5	274,058
Woodlands	224,685	715,449	839,505	2,194,463	3,974,102
Total	310,536	993,616	1,427,428	2,201,792	4,933,376

Source: Forestry Department, 2002

As depicted in Figure 1, woodlands cover approximately 19% of Uganda's lands surface. The majority (78%) of these woodlands are located on private and customary land (Figure 2). The rest are located in national parks and wildlife reserves (12%) and in central and local forest reserves (10%). Most of the deforestation and forest degradation occurs in woodlands outside the protected forest estate.

Woodlands, which are primarily located in northern, western and central Uganda (Table 2), account for 27% of Uganda's total biomass (Figure 3) and are the source of the majority of fuelwood in Uganda. As is the case with tropical high forests, the woodlands estate in Uganda is expected to decline (Table 3) principally as a result of the increasing demand for fuelwood.

Softwood plantations account for less than 0.2% of Uganda's land surface. The vast majority (61%) of these plantations are located in central and local forest reserves (Figure 2). The rest exist on private and customary land (33%) and in national parks and wildlife reserves (6%). Of the 20,000 hectares of softwood plantations that previously existed in central and local forest reserves, only 6,000 hectares currently exist (MWLE, 2001b).

Half the softwood plantations are located in the densely populated western part of Uganda (Table 2). Although plantations cover a very small area and account for only 1% of Uganda's total biomass (Figure 3), their impressive productivity of 16 tonnes per hectare every year offers encouraging prospects for the future.

Table 3: Trends (in hectares) in Forest Cover

Forest Type	1967	1972	1987	1993/94	1998	2002	2006
Plantations				35,000		35,066	50,000
Tropical High Forest (intact)	762,000	732,000	730,000	650,000	608,870	650,150	500,000
Tropical High Forest (degraded)				275,000	280,780	274,058	220,000
Woodlands				3,975,000		3,974,102	2,900,000

Source: NEMA, 2002

Since its creation in 2004, the National Forest Authority has made it its priority to restock softwood plantations in central forest reserves and, therefore, it is projected (Table 3) that the softwood plantation estate will grow in size.

III. OPPORTUNITIES FOR MAINTAINING AND EXPANDING A PERMANENT PROTECTED FOREST ESTATE

Marking boundaries

Very often, encroachment by frontline communities on forest reserves is inadvertent and simply a result of unclear forest reserve precincts. The effort to establish a PFE should begin with transparent demarcation of all forest reserve boundaries so that the extent of encroachment is clarified and remedial measures contemplated. Establishing the physical integrity of the PFE should be of paramount importance amongst the range of efforts designed to maintain it.

Shifting the management focus

As a deliberate strategy, government management of the protected forest estate should focus less on command-and-control mechanisms and adopt market-based mechanisms as a matter of policy. This shift in forestry governance should focus on the private sector as it currently is doing, but the contextualisation of private sector should consciously include communities living within or on the outskirts of the protected forest estate. For example, agroforestry efforts in two parishes around Mount Elgon National Park under the Mount Elgon Conservation and Development Project designed to reduce resource-use pressure on the park was a departure from the traditional authoritarian measures employed by the Forest Department and the Uganda Wildlife Authority.

Without this shift in policy designed to confer more ownership and management rights of the reserve to the private sector with special emphasis on frontline communities and demonstrate tangible benefits, the protected forest estate will continue to experience insurmountable pressure and degradation. This is manifested in the difficulties the NFA inherited from the FD in the management of South Busoga Forest Reserve (SBFR). Perhaps nowhere else in Uganda has antagonism between local communities and forest authorities been more pronounced, and the result is a reserve with less than a tenth of its forest intact.

Efforts by the forest authorities to attract foreign investment to reforest reserves such as SBFR may offer little as a way of establishing and maintaining the PFE, as population growth in frontline communities will continue to exert pressure on the reserve whether or not the plantations are in the hands of private investors. Rather, engaging frontline communities in reforestation of the reserves may be a more sustainable option as they will value and attempt to preserve the trees that they planted and own until harvest.

Therefore, and paradoxically, frontline communities that exert the most pressure on the protected forest estate may offer the most sustainable solution to the maintenance of a PFE in Uganda. Once forest-edge communities - on whom the long-term existence of the protected forest estate primarily depends - can access logistical and economic incentives, establishing and maintaining a PFE will be more feasible.



Subsistence agriculture on the boundary of Bwindi Impenetrable National Park, Kabale District.

This is not to suggest that large companies and organisations currently engaged in afforestation in forest reserves do not have a major role to play in maintaining the PFE. Large companies and organisations have the capacity to invest in the maintenance of the PFE on a large scale that frontline communities may only be able to achieve collectively and with significant capacity building. However, the serendipitous proximity of forest reserves to frontline communities, particularly in relation to increased land access for cultivation under the taungya system, is arguably a larger and more sustainable incentive for maintenance of the PFE than any that large companies and organisations can provide.

Expanding forests on private land

Establishment and perpetuation of a private forest estate outside forest reserves is critical for the maintenance and expansion of the PPFE. The private forest estate will reduce wood and non-wood resource demands on the PPFE. Due to looming timber shortages in Uganda and in neighbouring countries as a result of failure to establish forest plantations to meet future demand over the last few decades, investors in private forests can expect to reap high long-term profits over the next few decades. Unfortunately, private forest owners have hitherto gained minimally from their forests and, therefore, prefer to convert forested land to other land use types.



Nyundo Community Forest (background) owned by residents of Katiba Village, Kanungu District.

The NFA has recognised the value and potential of the private forest estate and established the Sawlog Grant Scheme. This scheme provides an incentive for individuals and organisations that plant 25 – 500 hectares of forests on their private land by refunding half the investment costs.

Joint forest management

The development of a working relationship between communities on the frontlines of forest reserves and the NFA offers the most valuable and sustainable means by which a PFE can be maintained. This relationship will require mutual trust and agreement on roles and responsibilities; and can be built on a combination of existing community and NFA interests – socio-economic benefits for the communities on one hand and the need to secure the physical integrity of forest reserves by NFA on the other hand. Accommodating the socio-economic interests of frontline communities will encourage their organisation into groups with which the NFA can partner with to secure and maintain the physical integrity of forest reserves.

One way to achieve this was competently demonstrated by communities in Buyengo sub-county, Jinja District adjacent to Butamira Forest Reserve prior to the awarding of a permit to Kakira Sugar Works to grow sugar cane in the reserve. Employing the taungya system, the Forest Department (FD) was able to form a partnership with the Buyengo community organised as the Butamira Pressure Group (BPG) to replant a eucalyptus plantation in the reserve while BPG grew food crops at the same time. The FD recognised that shortage of land was the single most important deterrent to improvement of livelihoods in Buyengo sub-county and that employing the taungya system would not only ease the land shortage, but would also allow for the restoration of a eucalyptus plantation in the reserve. This arrangement can be encouraged and replicated by the NFA in several of the currently degraded forest reserves.

Current efforts that focus on attracting private investors (often foreign, such as in South Busoga Forest Reserve) to replant large areas of degraded forest reserves neglect the opportunity to engage frontline communities and create a forest management system that will be more sustainable over the long-term. Land pressures outside the reserves will continue to increase at the same time as frontline communities realising little or no benefits from the reserves jointly managed by private investors and government, and this is likely to be untenable. However, this does not deny the fact that there certainly are instances where large private investors are more suitable for establishing forest plantations inside and outside forest reserves.

Private sector – frontline community partnerships

Establishing forestry sector partnerships between the private sector and frontline communities is one way to ensure sustainable forestry practices and relationships that share forestry costs and benefits amongst various parties. With government's encouragement of private sector-led growth and its renewed espousal of cooperatives, various private sector options can be attracted to make these partnerships more of a reality. These private sector options can include *private foreign companies*, *private local companies*, and *forest cooperatives* formed by frontline communities.

Although NFA has been able to attract private sector investment in CFRs (albeit with limited involvement of frontline communities through bush clearing and weeding at the initial plantation stage) using arrangements such as the Sawlog Grant Scheme, private sector investment would be of even more value to LFRs that are currently facing enormous challenges and neglect. Local governments should play a leading role in attracting the private sector to invest in LFRs, but make certain that this is done in partnership with frontline communities.

Economic incentives and innovative financing

Financing of forestry management in Uganda has traditionally occurred in three forms: the national budget allocation, levies on forest products and services, and grants and loans for forest projects from development partners. Another form of financing has emerged in recent years - attracting foreign investors to reforest degraded forest reserves. Examples of this are Saudi investment in South Busoga Forest Reserve and Dutch investment in Bukaleba Forest Reserve.

One additional option that Uganda may wish to pursue to finance the forestry sector is to charge other sectors, such as fisheries, that rely on forestry resources. For example, although it has yet to be implemented, Burkina Faso has a regulation that states that 3 percent of the revenue collected from taxes on tobacco, matches, petrol and oil should go to the Forest Equipment Fund (Verweij, 2002).

Although forest certification is often associated with export to environmentally aware markets in western countries, it also provides a valuable basis for the introduction of economic incentives for sustainable forestry. In the Ugandan context, for example, where poor forest management practices have led to the degradation of forest reserves and depletion of forests on private lands, certification can offer a basis by which to reverse this trend by ensuring minimum and sustainable standards of plantation quality and management. By offering the produce from certified forests economic rewards such as tax breaks and

access to exclusive markets, this will stimulate private sector motivation to practice sustainable forestry.

IV. RECOMMENDATIONS

- Commission an independent and comprehensive forest cover assessment as the basis for the delineation of a permanent forest estate.
- Establish physical possession of the permanent forest estate.
- Prepare and pass a law on state property (which includes the permanent forest estate) that would ensure transparency in relation to its demarcation, utilization, and management.
- Establish an independent monitoring mechanism that includes CSOs, which will investigate both forest crimes and the legality of government decision-making in relation to the use and management of forest resources.
- Build on recommendations of Rory/Carvalho report on harvesting.
- Develop measures to reduce pressures in and around CFRs, including encouraging expansion of the private forest estate, etc, etc.
- Update the National Biomass Study every five years to monitor management of the forestry sector.

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