THE STATUS OF FORESTRY IN UGANDA
PAST AND PRESENT SITUATION

A brief to Prof. F I B Kayanja, April 2009

1. Introduction

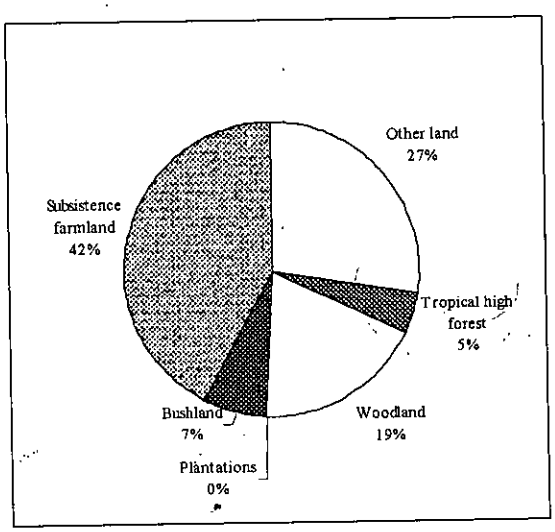
The Uganda forestry sector has evolved since its inception as the Scientific and Botany Department in 1898 through the Forestry Department (FD) 1929-2003 to the present cooperate National Forestry Authority (NFA). The first Uganda Forest Policy was gazetted in 1929 while the current "Uganda Forestry Policy" was gazetted in 2001. The guiding principles for the current forest sector policy include: national objectives for conservation and sustainable development, livelihoods and poverty, biodiversity and environmental services, partnership and governance, gender and equity, cultural and traditional institutions, international obligations, and forestry valuation. It recognizes that Uganda's forests and woodlands are central to the three pillars of sustainable development – the economy, society and the environment, and therefore forestry sector is promoted and given adequate priority. Promotion of positive understanding of forests and trees, expansion of research activities, and provision of new directions for sustainable development are also policy provisions.

The first laws on forestry were enacted in 1900 and underwent a series of revisions. The present forest law was enacted in 2003 as the Forestry and Tree Planting Act 2003. The legislation is mainly intended to protect and conserve the forest estate. It also provides for the use of forest products for domestic use and under license for trade and incomes.

2. Forest area and land cover

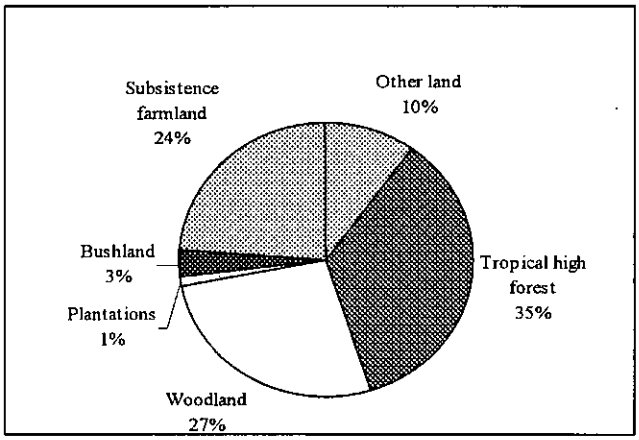
There are 4.9 million hectares of natural forests and woodlands in Uganda, which cover 24% of the land area. The majority of this forest area (81%) is woodland, 19% is tropical high forest and less than 1% is forest plantations. The distribution of these resources varies greatly by region, the northern region dominated by woodland, the majority of the tropical high forest in the western region.

Land cover in Uganda



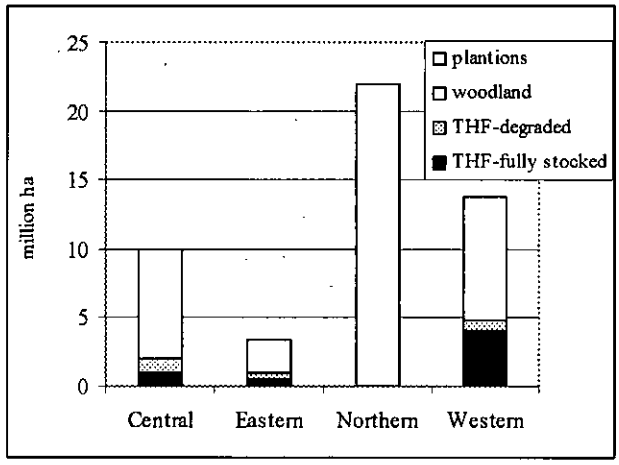
Source: based on National Biomass Study 2002

Biomass in Uganda



Source: based on National Biomass Study 2002

Forest areas by region



Source: based on National Biomass Study 1999

Although the area of tropical high forest is small (5% of Uganda's land area), it produces significant resources and is highly productive: it hold 35% of the country's total biomass resource and produces a net growth of 15 tones of wood on each hectare every year. The plantation resource is currently very small (0.2%) but also very productive (16 tones/ha/year), with great potential for expansion in area and yields.

In addition to the 4.9 million hectares of natural forests and woodlands, there are also substantial forest resources on-farm. Over 40% of the land is put to subsistence agriculture, and this holds 24% of national biomass in the form of scattered trees, forest patches and agroforestry crops included within farming systems. There is thus almost as much forest biomass on-farm as in the country's natural woodlands. Together with the existing natural forests on private land and in government reserves, these on-farm forest resources are a major focus of the National Forestry Plan, with particular reference to decentralization and the development of farmer-driven advisory services and agroforestry.

3. Forest Management and Conservation

Uganda's Forests and tree resources provide various products and services including fibre (wood), fuelwood (energy), food (fruits, nuts), healing remedies, (medicines), shade, shelter, windbreaks, beauty (aesthetics), soil and water conservation. Most of this production is done on small-scale enterprises and individual households. Over 90% of domestic energy in Uganda is provided by woody biomass.

The environmental service role of forests and trees in conservation of soils, watershed, bio-diversity, agriculture, livestock, tourism, carbon sequestration etc is recognized. Uganda is believed to have between 250,000 to 500,000 species of plants and animals, mostly dependent on forests. There are 115 species of birds, mammals and plants which are unique to Uganda's Forest Reserves

(FR's). Therefore the use of trees in soil and wildlife conservation, protection of water catchment areas, regulation of climate, air, purification and aesthetic values is emphasized in all forest management operations.

The National Forestry Authority (NFA) manages gazetted Central Forest Reserves (CFR) totaling to 1.2 million ha. The CFRs represent about 6% of the total land area of Uganda. (417,000 ha. are Tropical High Forests, 720,000 ha. woodland, and 30,000 ha. plantations).

The management of forest reserves varies and technical forestry management is highly decentralized to the Forest Reserve level. NFA has evolved as a highly scientific autonomous agency providing both the needed resources and technical back stopping for forest resources management. The forest reserve management is based on renewable Management Plans (MP). The MP was prepared in 1932. By 1961, over 75% of the whole forest estate was under the Management Plan (MP) system.

The management of natural forests, is moving towards conservation through zoning i.e 50% the forest reserve is managed for production while the remaining 50% is conservation areas including buffer zones between strict nature reserves and production forest. Joint management of forest reserve is being promoted as an option for sustainable forestry management. Eco-tourism is one such mechanism introduced in buffer management zones in some forest reserves. In timber production forests silvicultural systems are based on selection and shelter wood systems.

Industrial coniferous plantations management is faced with options for pure crops versus mixed tree crops. Older pure plantations have shown that pest and micro site differences affect productivity. Regeneration of harvested plantation forest areas has to take pest and site differences very seriously. The plantation forest silvicultural system is clear felling followed by artificial regeneration.

Eucalyptus plantations are managed using the clear felling system followed by coppicing and artificial regeneration. They mainly produce transmission poles, fencing poles, building poles and firewood.

4. Challenges for Sustainable Forest Management

The trend in Uganda is one of loss of forest cover and degradation of the remaining forest resources base:

- In the high forests about 250,000 ha is now degraded representing about one third of the country's valuable high forest.
- In woodlands, the degradation and clearance is clearly evident as the most significant loss of forest cover is in the woodland areas.
- In the government forest reserves a loss of 35% forest cover has been recorded and less than 10,000 ha of well-stocked softwood plantations currently remain.

Many factors are directly influencing the loss of forest cover and the declining forest resource base in Uganda. These include forest clearance for agriculture, the over-harvesting and degradation of forests, the encroachment of government reserves and the degazetting of forest reserves for alternative purposes.

This decline is due to various underlying factors including: policy deficiencies relating to the private sector and local communities over land tenure, access rights and responsibilities for resource management. There are market failures, including inappropriate royalty rates, poor market information, trade restrictions and hidden subsidies which distort the markets for forest products. There is poor regulation by weakened institutions which lack funding and capacity. Population growth and migration has increased demand for agricultural land and firewood energy and rural poverty restricts the ability to invest in sustainable land use practices.

5. Trees and Forests Resources for Carbon Trade

Under the Kyoto Protocol of clean development mechanism (CDM) of the United Nations Framework Convention on Climate Change (UNFCCC) only two forestry activities are allowed to engage in carbon trade: afforestation and reforestation (A/R). Like other CDM projects, A/R project developers are required to prepare a project design document (PDD) which describes in full the entire project life cycle. PDD is a costly documentation process that includes:

- statement on baseline scenario prior to project activity,
- additionality of the project,
- leakage associated with the project,
- monitoring plan for monitoring and archiving carbon sequestered by the project activity, approval of the project by the host country,
- independent verification of the project by the designated expert,
- validating the archived carbon by another independent expert and
- approval of carbon credits awarded to project developer by the UNFCCC Executive Board (EB).

Evidently, small scale A/R developers of Uganda cannot meet the cost of preparing a PDD. And yet without this document the developers cannot sell the sequestered carbon even if the trees have been planted. This serious dilemma is being addressed in the on-going negotiations of the UNFCCC.

Another area of forestry which is being negotiated is the reduction of carbon emissions by deferment of forest degradation and deforestation commonly known as REDD. Essentially, this has come about due to the realization that combined forest degrading and deforestation contributes about 25% of total global emissions of carbon into the atmosphere. Similarly, under this arrangement industrialized countries, the so-called Annex 1 parties shall pay for this valuable environmental service that the forests provide for mankind. However, several issues need to be resolved before Uganda and the rest of developing countries can benefit from REDD. Two of these issues stand out: the

methodology of quantifying the carbon stock in the standing natural forest and the equitable method of payment – who should benefit from REDD. Opinions differ, some parties (countries) prefer that recipient of the payment for environmental service (PES) should be the national governments while others advocate for the direct payment to forest dwellers together with people living adjacent to the forests.

Clearer picture of REDD will emerge at the end of this year during the conference of the parties (COP) when countries shall meet in Copenhagen, Denmark to make decisions on the negotiation texts which are currently being drafted by two working groups of UNFCCC.

6. The Future of Forestry in Uganda

Uganda forests, both natural and planted make an important contribution to national and local economies. Forest-based enterprises provide at least a third of all rural non-farm employment and generate income through the sale of wood and non-wood products. There is no doubt that many more useful forest and tree products in Uganda will be identified.

The ways in which forests have been perceived and used in Uganda have changed over time, and will continue to change. Many forest–dwellers have recognized, and continue to recognize, that forests provide them with their livelihoods. Others see forests primarily as a resource to be exploited and cleared to make way for agricultural. Such a view prevails for some few Ugandans responsible for encroachment and the high rates of deforestation.

However, during the recent years, there has been a paradigm shift in many peoples attitude towards forests and it is now widely recognized in the country that forests can provide more than timber, fuelwood, and non-wood forest products. Forests are increasingly being seen as part of the human and natural landscape. This has led to a more holistic approach to forestry management which recognizes the complex link between environment and society.

Population growth, migration, urbanization, changes in technology and advances in science are among the many factors which have helped shape the way in which we perceive, manage, conserve and use forest ~~in Uganda~~:

- Rural communities expect forests to provide the traditional range of products from building poles, to fuelwood, livestock fodder to medicinal plants.
- Urban communities expect aesthetic and recreation values from forests and tree resources.
- Conservationist emphasise the vital role forests play in sustaining biodiversity.
- Global warming and water shortage look to the forests to provide a range of environmental services.
- Forest industry expects forests to provide roundwood and other raw material.

Lastly forests have a vital role to play in developing new approaches to rural development. Their wise use will help us to achieve at least two of the United Nations Millennium Development goals: those of reducing extreme poverty and hunger and ensuring environmental sustainability.