

ENVIRONMENTAL AUDIT REPORT ON FORESTRY ACTIVITIES IN UGANDA



**OFFICE OF THE AUDITOR GENERAL
UGANDA**

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LIST OF ABBREVIATIONS

AFROSAI-E	African Organization of Supreme Audit Institutions (English speaking)
AG	Auditor General
CFR	Central Forest Reserve
DFS	District Forest Service
EIA	Environmental Impact Assessment
FMPs	Forest Management Plans
GOU	Government of Uganda
INTOSAI	International Organization of Supreme Audit Institutions
MWE	Ministry of Water and Environment
NARO	National Agricultural Research Organization
NEMA	National Environment Management Authority
NFA	National Forestry Authority
NFTPA	National Forestry and Tree Planting Act, 2003
OAG	Office of the Auditor General

EXECUTIVE SUMMARY

In accordance with Section 13(b) of the National Audit Act 2008, I carried out an environmental audit of Forestry activities in the country. The audit involved a review of the activities that have been implemented in the Forestry Sector from July 2003 to December 2009 as well as field observations of selected forests across the country.

The National Forestry and Tree Planting Act (2003) grants powers for the management of Central Forest Reserves to The National Forestry Authority, while the rest of the forests are under the management of District Forest Services (DFS). The Act assigns the role of policy, guidelines and regulations formulation for the sector to the line **Ministry of Water, and Environment**.

The audit focused on the activities of the National Forestry Authority since its inception in 2003. However, several issues noted during the audit also touch on the other players in the sector (i.e. the DFS and the Ministry of Water and Environment).

The findings summarized below were therefore presented to the NFA management and the Ministry of Water and Environment. Only NFA management provided me with written clarifications regarding the matters there in.

FINDINGS:-

- The Regulations to operationalise the National Forestry and Tree Planting Act, 2003 have never been developed as required by the Act. Without these regulations, adherence to the provisions of the Act may not be effectively enforced.
- There have been shortfalls in funding for forestry programmes over the years leading to many key activities in the strategic plan not being implemented.
- There has been continued decline in forestry cover despite the various government interventions over the years. This is a result of the limited capacity by NFA to achieve its afforestation targets, weaknesses in forestry management practices and illegal activities in government forests.

- The NFA licensed part of the central forest reserves to various private tree developers to plant fast maturing species like pine and eucalyptus. Several licensed individuals have not adhered to the conditions stipulated in the contracts signed with the NFA.
- Most Central Forest Reserves have no approved management plans. Without plans, management of the forest reserves may not follow best practices. This can result into inefficiencies and waste.
- Boundary demarcation in the forest reserves has not been properly undertaken. This exposes the reserves to the risk of encroachment and illegal allocations.
- There is continuing encroachment of forest land in various parts of the country.
- The mandate of the districts in regard to the sustainable forests management is not being adequately undertaken. The majority of districts have not set up District Forestry Services to manage local forest reserves. Where they have been established, they are understaffed and grossly underfunded.
- Some forests were degazetted with no alternative land of equal measure being allocated for the plantation of new forests to strike a balance between development initiatives and the environment. This also explains the high rate of deforestation.
- Illegal activities continue to be carried out unchecked, in the forest reserves. These were mainly in the form of land clearing for agriculture, illegal settlement on the reserves, charcoal burning, and animal grazing by the communities adjacent to the reserves.
- Management does not have a proper risk management strategy.
- Not all CFRs have approved Environmental Impact Assessment reports.
- Some forest reserves are being attacked by invasive species.

Recommendations

- The Ministry of Water and Environment should expedite the process of formulation and approval of the regulations to enable effective implementation of the National Forestry Act.
- NFA management should come up with strategies to boost internally generated revenues and also strengthen the internal control procedures in the revenue collection and

inventory management systems to enable the entity achieve its goal of financial sustainability

- Management of the forestry sector needs to review the strategies they have applied over the years if positive trends on forestry cover are to be attained
- NFA management is urged to intensify its monitoring arrangements to identify all the non compliant farmers and ensure enforcement of all the contracts they entered with them.
- NFA management is advised to expedite the process of preparation and approval of the management plans to enable systematic management of the forests.
- There is need to expedite the process of demarcating and re-opening of boundaries for all forest reserves.
- The illegal allocation of forest land should be properly investigated and appropriate action taken against those responsible. The Ministry of Water and Environment should also strengthen its monitoring and inspection activities and ensure proper coordination between the stakeholders involved.
- The requirements of the current law regarding degazetting of forest land should be strictly enforced.
- Management needs to adopt a proactive and comprehensive approach to management of risks by crafting a clear strategy to manage all the identified risks.
- There is need for coordinated action by all stake holders including government, local communities, politicians, etc, to address the problem of illegal activities in the forest reserves, in addition to intensifying monitoring and promotion of public awareness.
- The requirements of the current law regarding degazetting of forest land should be strictly enforced.

John F.S. Muwanga
AUDITOR GENERAL

26th July 2010.

INTRODUCTION

1.0 BACKGROUND TO THE AUDIT

1.1. MANDATE

The mandate for conducting environmental audits is derived from Section 13(1)(a), of the National Audit Act 2008, which states that ‘the Auditor General shall conduct financial, value for money audits and other audits such as gender and environment audits in respect of a project or activity involving public funds’. As an independent external auditor of Government, the role of the Auditor-General is to provide an independent oversight of government operations through financial and other management audits. The objective of the audits conducted by the Auditor General is to:-

- determine whether public funds are spent efficiently, effectively, and in accordance with applicable laws
- evaluate internal controls and help improve governance in Government and in public sector agencies
- to undertake investigations to assess whether illegal or improper activities are occurring;
- determine whether public sector agencies are in compliance with applicable laws and regulations; Rules and procedures and,
- To provide assistance to the Parliament and the Public Accounts Committee in support of their oversight and decision-making responsibilities.

1.2. JUSTIFICATION FOR THE FORESTRY AUDIT

The environment has become a world – wide concern in the last decade, being the focus of discussions in a variety of forums both at national and international levels. Because environmental problems are rooted in economic and social policies, they occur at all levels from local to global, and success requires action by many players over long periods of time. The government is responsible for dealing with these problems and working towards solutions. Accordingly the government has tried to address this over the years by creating

policies, and programs enacting environmental legislation, and through international institutions and treaties, laws and regulations and expenditures.

Although it is not the Auditor General's function to question policy, it is his responsibility to investigate the effect of policy and the management measures that lead to policy decisions. In this way the Auditor General can help the Government do a better job. Addressing environmental matters falls squarely within the above mandate more precisely because of the following reasons:-

- The Government spends significant public resources on managing environmental problems; the Auditor General needs to hold the government accountable for prudent financial management, reporting, and results.
- The Government has signed numerous international agreements and enacted domestic laws and regulations; the Auditor General needs to hold the government accountable for compliance.
- Government in its financial statements must account for environmental costs and liabilities created by its land holdings and operations – accounting standards require that there should be adherence to proper accounting practices.

The purpose of this management report/environmental audit report is therefore to make known the findings of the audit regarding the management of forestry resources in the country. The report is not intended to be exhaustive. In line with audits of this nature, the intention is to provide the reader with a general understanding of the current situation with regard to forestry management and in particular, the adequacy of the management measures with regard to the risks and applicable legislation, regulations and procedures associated therewith.

It is hoped that the report will give rise to corrective steps, which will contribute constructively to the establishment and implementation of proper management measures regarding forestry management. It is also hoped that the applicable legislation, regulations and procedures will, in the interest of the environment as well as sustainable development, be adhered to.

2. AUDIT OBJECTIVES

The following were the audit objectives:-

- i. To ascertain whether the forestry management practices are in compliance with policies and guidelines and the laid down laws and regulations.
- ii. To assess the performance of the key players in forestry management.
- iii. Make a report of the findings to parliament

3. SPECIFIC AUDIT CRITERIA USED AND THEIR CORRESPONDING SOURCES

The following criteria were applied during the audit:-

- i. **The constitution of the republic of Uganda of 1995:**
It is stated in the constitution that: **'It is the duty of parliament to protect and preserve the environment from abuse, pollution and degradation and also to provide for measures intended to manage the environment for sustainable development and promotion of environmental awareness'**.
- ii. The Forestry and Tree planting Act 2003, whose purpose is to:-
 - to create an integrated forest sector that will facilitate the achievement of sustainable increases in economic, social and environmental benefits from forests and trees by all the people of Uganda;
 - to guide and cause the people of Uganda to plant trees;
 - to ensure that forests and trees are conserved and managed in a manner that meets the needs of the present generation without compromising the rights of future generations by safeguarding forest biological diversity and the environmental benefits that accrue from forests and trees;
 - to promote the improvement of livelihoods through strategies and actions that contribute to poverty eradication;
 - to encourage public participation in the management and conservation of forests and trees;
 - to facilitate greater public awareness of the cultural, economic and social benefits of conserving and increasing sustainable forest cover;

- to promote the decentralization and devolution of functions, powers and services within the forest sector; and
 - to ensure that environmental benefits, costs and values are reflected in strategies and activities relating to forestry.
- iii. **National Environment statute 1995** whose objective is to promote sustainable development by:-
- a. Integrating environmental requirements into all planning and production processes
 - b. Ensuring that renewable resources are optimally used through reduced waste use of appropriate technology and finding of alternatives to present use of resources.
- iv. The Budget and financial statements of NFA from inception to 30th June 2009
- v. Regulations and procedure guides issued by the NFA, including:
- Management of Natural Forests in CFRs (December 2006)
 - Guidelines for Land Allocation in CFRs (December 2005)
 - A field guide to Integrated Stock Survey and Management Inventory (December 2005)
 - Standards for Boundary demarcation
 - Logging in Natural Forests – Supervisors toolkit (June 2005)
 - Managing Central Forests Reserves for the People of Uganda (Volume 2: 2008)
- viii. Best Practice guide on the audit of Forestry
- ix. Contracts – leased Forest reserves to private developers
- x. INTOSAI: Guidance on conducting audits of activities with an environmental perspective
- xi. International accords:-
- Uganda is an active member of the global community of Nations, having entered into several regional and international environmental protocols, conventions and agreements aimed at biodiversity conservation. Some of these include The Ramsar Convention, Ramsar (1971), Convention on the protection of World Cultural and

Natural Heritage, Paris, 1972, Convention on International Trade in Endangered Species (CITES), Washington, 1973; Agreement on a tripartite Environment Management programme for Lake Victoria, 1994; The United Nations Convention to Combat Desertification, 1994; The United Nations Framework Convention on Climate Change (FCCC), 1992.

4. METHODS OF DATA COLLECTION

Data was collected through the following data collection methods:-

a. FIELD OBSERVATIONS

The objective of the inspections was to observe physically the efforts made by the various stake holders involved in forestry management.

b. INTERVIEWS

A number of officers were contacted and interviewed with a view of obtaining information on how the various stake holders fulfilled their obligations in management of forestry. The officers interviewed are listed as an appendix at the end of this report.

c. DOCUMENT REVIEWS

Some documents were also reviewed to assess the implementation and progress of activities carried out. The following documents were reviewed:-

- Uganda Forestry Nature Conservation Master plan (reviewed in 2002)
- Third National Biodiversity Report Prepared by the National Environment Management Authority (NEMA), January 2006
- NFA's Annual Reports (2004/5, 2005/6, 2006/7, 2007/8 & 2008/9)
- NFA start-up Funding Final Performance report 2003-2008 released in March 2009
- Land cover of Uganda – a report by the NFA in 2005
- National Biomass Study Technical Report

d. ANALYTICAL REVIEWS

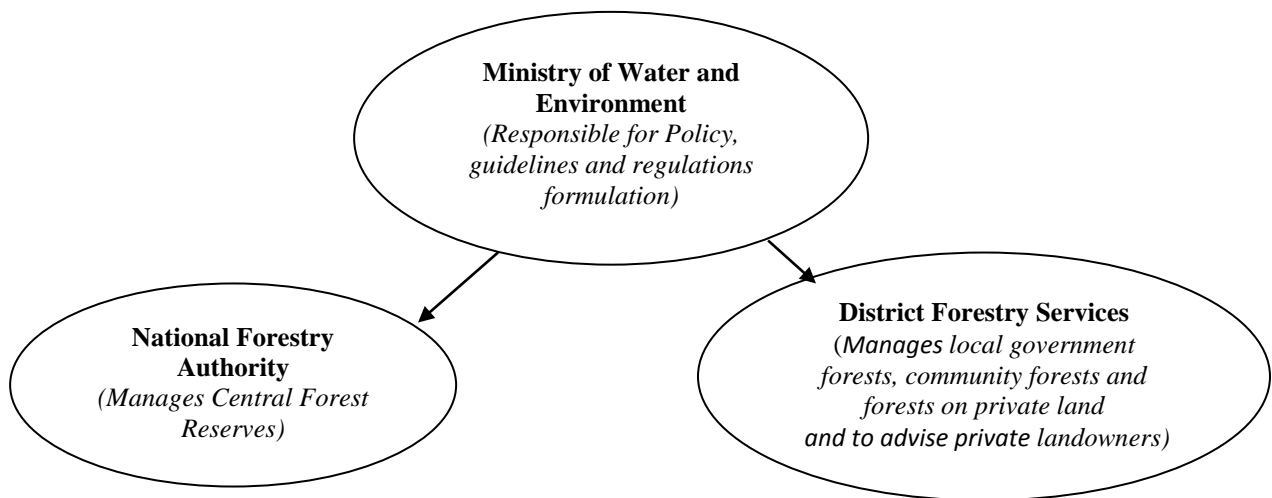
Analytical procedures were also performed on available secondary data with a view of analyzing trends and performance.

5. BACK GROUND OF THE FORESTRY SECTOR

The Forestry department under the MWE is the oldest Government Scientific department established in 1898¹. Government embarked on the restructuring of the forestry sector with support from development partners. The outcome of the restructuring exercise included the National Forestry Policy (2001) and the establishment of the **National Forestry Authority** (to manage the country's Central Forest Reserves which currently total to 506 representing about 15% of the total forest cover in Uganda) under the National Forestry and Tree Planting Act (2003).

The same Act establishes the **District Forestry Services** to manage Local Forest Reserves (representing about 85% of the forest cover in Uganda) and to advise private landowners on how to sustainably manage the forests on their lands and on-farm forestry matters.

The Act assigns the role of Policy, guidelines and regulations formulation for the sector to the line **Ministry of Water, and Environment**. The Forestry Sector Support Department (FSSD) offers supportive back-up to both the NFA and District Forest Services. A schematic representation of the above roles is as presented below:-



¹ Source: Third National Biodiversity Report Prepared by the National Environment Management Authority (NEMA), January 2006

6. SIGNIFICANT AUDIT FINDINGS AND RECOMMENDATIONS

6.1. Regulations to operationalise the National Forestry and Tree Planting Act, 2003

It has been noted that although the National Forestry and tree Planting Act came into force in August 2003, the regulations to operationalise it as stipulated under section 92 of the Act, have never been developed. Such Regulations are supposed to provide for among other things; the basis of determining fees, manner of sale of forest products, species of trees to harvest and their movement, what may/ may not be harvested, prohibition/regulation of trade in forest produce and genetic materials, prohibition, control and management of fires, introduction of alien and exotic species, the certification of forests and labeling of forest products to verify their origin and whether from sustainable source of supply.

In the absence of the regulations, adherence to the provisions in National Forestry and tree planting the Act may not be effectively enforced by all the concerned stake holders.

In their response, NFA management (as one of the key stake holders in the Forestry sector), explained that the relevant sections of the old regulations were being used. However, this is considered illegal, since with the coming into force of the National Forestry and Tree Planting Act, 2003, all the regulations relating to the old Act were repealed (as per Section 96).

It is recommended that the Ministry of Water and Environment expedites the process of formulation and approval of the regulations to enable effective implementation of the Act.

6.2. Funding for the NFA

The NFA has over the years since its inception relied on funding from Development partners and the Government of Uganda. According to the NFTP 2003, the NFA was slated to attain financial sustainability by the fourth year of operation i.e. by June 2008. This is further amplified in the entity's five year strategic plan for 2004-2009. However, this has not been possible as management has continued to register shortfalls in revenue over the years. By the end of June 2008, the combined contribution of the internally generated resources was at 51%. However the entity-generated funds could cover only 80% of the recurrent costs as per

the end of June 2008. From the table below, it's evident that financial sustainability may not be achieved in the short run given the stagnation of the own generated resources at just above 60 % over the period of 3 years:-

**Proportion of budget funded from
government and own sources**

	2004/5	2005/6	2006/7	2007/8
Target	29%	56%	70%	85%
Actual	48%	62%	62%	64.5%
Variance	19%	6%	8%	20.5%

source : start up final performance report 2003-2008

My annual financial audit reports have pointed out several anomalies in revenue collection and inventory management which have to an extent contributed to NFAs failure to attain its set targets. These include the following:-

Financial Year	Issues raised
2007/8 and 2008/9	<ul style="list-style-type: none"> • Failure to have proper growing stock records including details of the location, size and values • loss of seeds worth Ushs.228,265,000 which occurred at the National Tree Seed Centre-Namanve • Arbitrary Allocations of central Forest Reserves for harvesting • Anomalies in award of contracts to harvest mature trees • Poor supervision of licensed sand miners in some forest reserves • Loss of revenue (Ushs.760,000,000) from Lendu (Okavu-Reru) Forest Plantation and also another Ushs.100,000,000 from Mwenge plantation) • Failure to maintain proper stock records • Non Performing Tree Planting Permits • Failure to properly account for the pre-numbered and accountable Forest Produce Declaration Forms

Management explained that much as NFA’s Internally Generated Revenue (Non Tax Revenue) increased from shs.5.4 billion in June 2005 to shs.15 billion in June 2009, it was short lived and unsustainable as most of this was from mature timber plantations which are now exhausted. They also indicated that funding from Development Partners had dropped from shs.6.4 billion in June 2005 to shs.2.1 billion in June 2009.

Management should come up with strategies to boost internally generated revenues and also strengthen the internal control procedures in the revenue collection and inventory management systems to enable the entity achieve its goal of financial sustainability.

6.3. Forestry cover

It was noted that there has been continued decline in forestry cover despite various Government interventions over the years and NFAs commitment to substantially increase the size of the Central Forest Reserves area, being managed under arrangements with local governments, communities and private investors. Additional Government intervention has been through gazetting, entering into public-private partnerships, reclaiming of forest land and sensitization of the population on the need for better forest cover.

However, no material positive trends have been noted so far.

It was further noted that NFA on its part has failed to meet its afforestation targets as detailed below²:-

	2004/5	2005/6	2006/7	2007/8
Target (Ha)	4,400	5,600	7,600	10,100
Actual (Ha)	2,123	2,118	1,361	1,370
Variance	2,277	3,482	6,239	8,730

² Source: start up final performance report 2003-2008

The other forests not managed by NFA have even declined at a higher rate. According to the State of the Environment Report 2007/8, the overall national rate of deforestation is about 2%, but some parts of the country are losing their forest cover at higher rates than others as exemplified below³:-

District	1990 (ha)	2005 (ha)	Loss	% Loss
Kibaale	114,102.66	58,268.06	-55,834.60	48.9
Mukono	100,626.65	63,977.12	-36,649.53	36.4
Wakiso	28,461.12	3,781.68	-24,679.44	86.7
Hoima	75,143.95	58,889.27	-16,254.68	21.6
Mayuge	15,162.05	0	-15,162.05	100
Mubende	18,618.86	3,906.65	-14,712.22	79.0
Mpigi	40,300.64	27,169.67	-13,130.98	32.6
Mityana	10,247.86	4,137.66	-6,110.20	59.6
Masindi	36,373.82	31,933.49	-4,440.34	12.2

The above analysis shows that Mayuge District has lost all its forest cover. Mayuge is followed by Wakiso which has a deforestation rate of 86.7%, Mubende (79.0 %), Mityana (59.6%) and Kibaale (48.9%) respectively. This decline is particularly worrying since the demand for the forests products has been steadily rising over the years.

NFA management explained that most of the deforestation is outside the Protected Areas (PAs) where it has no jurisdiction and that despite resource constraints NFA has a plantation strategy up to 2025 to plant 200,000 Ha together with the Private Sector.

It is recommended that management of the forestry sector reviews the strategies it has applied over the years if positive trends on forestry cover are to be attained.




6.4. Policy on the partnership with private sector

In a bid to improve on the forest cover, the National Forestry Authority took an initiative to have a partnership with the private sector to allow for community participation in forest management on both government and private land in line with policy statement 3 and 5 of the Uganda forestry policy. Under this initiative, the authority licensed part of the central forest reserves to various private tree developers to plant fast maturing species like pine and

³ Source: NFA 2006

eucalyptus. This was in addition to licences that had been issued during the forestry department administration. This was mainly done in the ranges of Budongo, Kyoga, and the south western region.

During inspections it was noted that several licensed individuals have not adhered to the conditions stipulated in the contracts signed with Government. Some developers have not planted any trees at all, while others have grown other types of trees (other than the recommended ones) or even cut trees in the leased areas without replanting. Notable cases were cited in the Bujawe and Nyakunyu CFR of the Budongo ranges where a total of 5,837 hectares previously licensed have not been planted, Namatale and Sala CFRs where land licensed has been put to other use.

		
<p>Land allocated to a one Onzima in Bujawe forest reserve (Hoima) more than 5 five years but planting has not taken off.</p>		<p>Un planted area in Nyakunyu forest reserve (Masindi).</p>
		
<p>Land in Sala CFR allocated to Bugwere High School being used for grazing.</p>	<p>Cultivation in land licensed to private tree planter in Namatale CFR (Mbale)</p>	<p>Fresh clearing of land for cultivation in Sala CFR</p>



Potato garden in the Sala CFR

It was noted that out of 120,000 ha licensed, only 20% (24,000 ha) were planted over the 4 year period ending June 2008⁴. Apparently, monitoring the licensed individuals has not been adequate.

NFA management explained that it is currently auditing the performances of licensed tree farmers in each CFR with the intention of cancelling all licenses of those who have not performed. They indicated that so far over 570 non performing licenses have been cancelled. It is recommended that management intensifies its monitoring arrangements to identify all the non compliant farmers and ensure enforcement of all the contracts they entered with them.

6.5. Forest Management Plans (FMPs)

The National Forestry and Tree Planting Act requires that all forests have approved management plans to ensure proper management of the forestry resources in the respective reserves. Section 28 of the Act further provides for the procedures for preparation of the management plans including consultation and dissemination of the plan to the local communities and the approval by the minister.

A review revealed that out of the 506 central forest reserves, only one had an approved management plan, 51 had draft plans of which only 18 had been submitted for approval by the minister. Most of the management plans had been prepared between 2006 and 2008 to cover periods of 10-20 years subject to a review every 5 years.

⁴ Source: Start-up Support Performance Report November 2003-June 2008

In addition, the 51 draft plans relate to positions of these forest reserves and appear to be generic documents drawn to be applicable for several forests. The extent to which these general plans could be followed will be limited since they are not drawn to cater for specific development or management needs of specific forests.

Failure to have specific and approved management plans leaves an administrative vacuum which encourages practices that do not favor sustainable management of the forest resources. Management plans for leased out/private forests planted on government land is however called for at the level of application for the land.

Management attributed the shortcoming to the long, tedious and expensive procedures leading to the approval of the FMPs.

Management is advised to expedite the process of preparation and approval of the management plans to enable systematic management of the forests. A clear strategy for monitoring compliance with the management plans should also be developed.

There is also need for a review of the approval procedures to eliminate delays and improve efficiency.

6.6. Forest boundaries

It was noted that the NFA has set standards for boundary demarcation in the central forest reserves for proper management. These include use of mounds, trenches, live markers and corner cairns to demarcate forest reserve land. In addition, re-opening of boundaries in forest reserves was being done.

However, standards have not been uniformly applied to all forest reserves. Some Central Forest Reserves like Alwi, Oming and Opio in Nebbi; Kisangi in Kasese and Kabarole; some sections of Bugoma, Bujawe and Kasongire had no clear boundaries and this could partly

explain the extensive encroachment on these reserves, characterized by overgrazing and rampant charcoal burning within the reserves. In addition, most of the central forest reserves lack land titles which has led to several boundary complaints and encroachment.

NFA management explained that out of a total boundary length of approximately 11,000km around the 506 CFRs, NFA has managed to re-open about 6,670km.

There is need to expedite the process of demarcating and re-opening of boundaries for all forest reserves.

6.7. Degazetting of forests

The National Forestry and tree planting Act requires that before a forest is degazetted, another land of equal measure should be allocated for the plantation of new forests to strike a balance between development initiatives and the environment.

During inspections, exceptions to this requirement were noted in cases where no alternative land was allocated for tree planting. This was mainly noted in the urban areas where prime forest land is allocated for alternate uses. Cases in point include the Namanve forest reserve that was degazetted to an industrial park, but no alternative land was identified for plantation of replacement forests. In a related development the Nebbi urban forest reserve was allocated by the District Land Board but no other land was allocated for replacement of the forest. The photos below were taken from such degazetted land:-



Development activities in the given away Nebbi forest reserve. Relocation of the reserve and planting has not been done yet.	Fresh clearing in the Nebbi forest reserve
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Without the National Forestry Regulations to operationalise the Act, there is currently no mechanism in place to ensure that this requirement is adhered to by all the stake holders involved.

Management explained that Namanve forest was degazetted basing on 1964 Forest Act which did not provide for Land exchange. However, this was illegal, since with the coming into force of the NFTP 2003, all the regulations relating to the old Act were repealed (as per Section 96 of the NFTP 2003).

It is recommended that the requirements of the current law regarding degazetting of forest land be strictly enforced.







6.8. Illegal Activities in the forest reserves




The National Forestry and Tree Planting Act defines illegal activities as cutting, burning, disturbing or destroying any forest produce without permission from the relevant authority. During field inspections, it was noted that a number of such activities continued to be carried out, unchecked, in the forest reserves. These were mainly in the form of land clearing for agriculture, settlement on the reserves, charcoal burning, and animal grazing by the communities adjacent to the reserves.

For example, in Kapinpina forest reserve, large chunks of land have been fenced off for animal grazing while some portions have an upcoming trading centre and a school. In addition, in Fort portal, part of a forest reserve has been occupied by a private developer for construction of a school. In Hoima district, a big part of the Bujawe forest reserve has been and continues to be cleared for crop cultivation by local communities. Charcoal burning has been common in the districts of Luwero, Nakasongola and Nebbi where they form the main source of livelihood for the local populations. This is further aggravated by the need for local revenue by the district administrations. For instance in Masindi district, charcoal burning licence has been identified as a revenue source and is tendered out which makes the control over the activity a challenge.

These illegal activities in the forest reserves deplete the forest cover and affect the value of the forest resource. Continued illegal activities in the forest reserves could have devastating effects on the environment like climatic changes, an imbalanced ecosystem, etc.

The photos below show the extent of the illegal activities in the forest reserves inspected:-

		
<p>A local valley dam in Kalagala forest reserve</p>	<p>Fresh charcoal burning in Alwi forest reserve (Nebbi)</p>	<p>Dam excavated in the Kapinpina forest reserve (Luwero).</p>
		
<p>Fresh land clearing for cultivation in Bujawe forest reserve</p>	<p>Tobacco garden in the Bujawe forest reserve (Hoima)</p>	<p>Construction materials in the forest reserve. Permanent buildings not within the terms of the plantation licences.</p>

		
<p>Cassava crop in the Omier FR</p>	<p>Fresh clearing for agriculture- Omier FR</p>	<p>Hardened ground in Alwi FR due to extensive animal grazing. Vegetation growth is curtailed.</p>

There is need for coordinated action by all stake holders including government, local communities, politicians, etc, to address the problem of illegal activities in the forest reserves, in addition to intensified monitoring and promotion of public awareness.

6.9. District Forest Services (DFS)

The National Forestry and Tree Planting Act, 2003 establishes the District Forestry Services to manage Local Forest Reserves (representing about 85% of the forest cover in Uganda) and to advise private landowners on how to sustainably manage the forests on their lands and on-farm forestry matters.

It was noted however, that this mandate of the districts in regard to the sustainable forests management is not being adequately undertaken. The majority of the districts in the country have not set up DFS. DFS's are under staffed, insufficiently funded and poorly facilitated, this hampers effective control, given the vulnerability of the forests to charcoal burning which forms one of the main forms of lively hood in the districts. There has been several cases where the districts have authorized the harvesting of forests without clarifying clearly the exact area to be harvested and sometimes harvesters have gone to the CFR's. Cases include Mpigi, Namwasa, and Mayuge. In Mpigi district, forest land in Kazooba, Kitubulu and Kyewaga has been given away to individuals. Other cases include Bukaleba CFR, where the district leased 999 hectares to M/S Arise Africa for establishment of a secondary school and an orphanage

centre; and leased of part of the Budongo forest reserve to M/S Bahesco Ltd, and the whole of Kahurokobwire forest reserve to individuals.

NFA management explained that this is the responsibility of Ministry of Water and Environment and the Ministry of Local Government and that they are aware of the encroachment in areas like Bukaleba and Budongo which have resulted from issuing of illegal land titles in CFRs, in addition, to licensing harvesters in CFRs by some District Forest Services.

The illegal allocation of forest lands should be properly investigated and appropriate action taken against those responsible. The Ministry of Water and Environment should also strengthen its monitoring and inspection and ensure proper coordination between the stakeholders activities.

6.10. Encroachment of the forest reserves






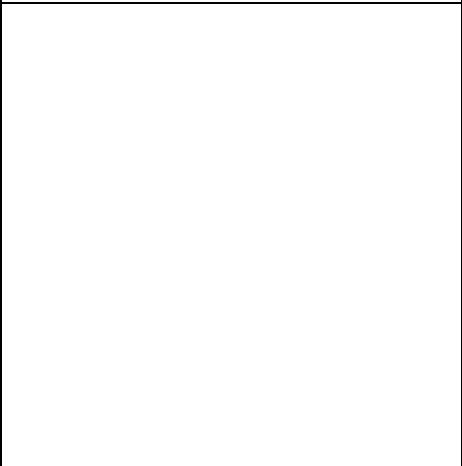
Encroachment of the forest land is one of the major challenges to sustainable forest management. Encroachment has been due to human activities like quest to increase arable land, settlement, urbanization. A review of the forestry reports indicated that over a period of 15 years Uganda's forest cover has dropped from 4.9 m hectares in 1990 to 3.6 m in 2005 representing an overall reduction of 27% and a 1.9% depletion rate per annum⁵. This rate is high compared to other countries in the region with rates below 1%. The highest encroachment is noted mainly in the lake shore range where there are an estimated number of 150,000 encroachers.

During the field inspections the highest incidences of encroachment were noted in the following central and local forest reserves: Omier and Awang in Nebbi, Namatale in Mbale, Nakwiga in Butaleja, Kasongore in Hoima, Bukaleba in Mayuge district. Others include; Rakai where the entire Kagamba sub county is within the forest reserves of Kijanibalola and Kyamazi.

⁵ Start up funding financial performance report of March 2009

In Mburamaizi, Kanungu District, It was noted that an army battalion was established in the forest reserve and this is already having an impact on the environment. In Mbarara extensive encroachment has been noted in the Rwemitongole block where forest land has been used for setting up of schools, churches and an orphanage centre.

The photos below show the extent of encroachment in the forest reserves inspected:-

		
<p>A secondary school built on the forest reserve</p>	<p>Bible institute in Lwemitongole Block</p>	<p>A primary school constructed in the Forest reserve</p>
		
<p>Secondary school under construction in Bukaleba Forest reserve in Mayuge</p>	<p>Orphanage in Bukaleba CFR, land leased to Arise Africa by the Iganga district land board</p>	



		
<p>Encroachment in the Nyagak local forest reserve (Nebbi)</p>	<p>Up coming trading centre in Kapinpina forest reserve</p>	<p>Settlement in the extensively encroached Omier forest reserve</p>

6.11. Risk management

Management is exposed to varying levels of risk. Notable among the risks is that of loss of the plantations through fire, malicious destruction and crop failure. Other forms of risks manifest in loss of land under the private partnership or court challenges and security threats to the operational staff.

Management has tried to implement preventive measures like maintenance of fire lines and provision of some fire fighting devices at the stations.

However, there appears to be no proper strategy for addressing all the risks identified by management. In addition, capacity to handle the fire risks are limited due to lack of adequate field equipment and materials (like fire towers, underground water tanks, etc). Several reserves have been affected by fires as exemplified in the photographs below, which were taken during our field inspections:-

	
<p>Remnants of pine trees in the part of Nyakunyu forest reserve burnt in February 2010</p>	<p>Section of the burnt natural forest in Murchison game park</p>

Management needs to adopt a proactive and comprehensive approach to management of risks by crafting a clear strategy to manage all the identified risks.

Management explained that capacity is being built to manage risks from fire and others that affect forests.

6.12. Logging in natural forests

It was noted that there exists guidelines on logging in natural forests (i.e. supervisor's toolkit of June 2005). The guidelines cover among other things; staff responsibilities, pre-harvesting operations, harvesting operations and public auction of logs. Field observations indicated that the guidelines were being complied with to an extent, in respect to stock mapping, log grading, and measurement.

However, it was established that NFA and the logging clients do not maintain a record of the timber milled from the sold logs in order to carry out a proper assessment of the efficiency of the milling activities. During field inspections, evidence of inefficiencies in milling was observed at some milling sites, such as the one exemplified below:-



According to the Uganda forestry policy⁶ there is wastage in the milling activities with a timber conversion rate of only 25%. The high rates of wastage in milling activities leads to increased need to cut more trees.

In their response, NFA explained that the recovery percentage has since increased from 25% to 40% in all plantations.

Management is advised to ensure that it encourages adoption of more efficient milling practices so as to save on the need to cut more trees.

6.13. Environmental Impact Assessment (EIA)

It is a requirement under Section 7(c) of the NFTP that all CFRs have EIA reports produced and approved by NEMA. For all the management plans that were developed, EIAs were carried out.

However, it was noted that many central forest reserves without Management Plans do not have approved EIA reports contrary to the law.

Where EIAs were carried out, there appears to be no evidence of follow up to ensure that mitigation measures stated in the EIA reports are actually undertaken. A case in point is the oil exploration by M/S Dominion in Malamagambo forest, where offset planting was supposed to be done by the implementers, but this remains undone to date.

There is need therefore, to comply with the law and ensure that EIAs are produced, approved and appropriately followed up.

Management explained that they are training their entire field staff in EIA to be able to follow up the environmental issues at their level.

6.14. Invasive and endangered species

During the field inspections, an un-identified invasive species was seen covering large parts of the Alwi forest reserve in Nebbi district as shown below:-

⁶



The unknown climbing plant in ALWI forest reserve which is threatening the lives of other plants.

It was also noted that the shear nut butter tree continues to be threatened by the charcoal burners in the districts of West Nile where it is common.



The shear nut Butter tree

There appears to be no formal plans to deal with the above matters.

Management explained that NARO is working on this matter in collaboration with other lead institutions. In addition, the Minister had already gazetted the shear nut butter tree as reserved tree species.