REPUBLIC OF UGANDA

THE NATIONAL FOREST PLAN 2011/12 – 2021/22

Ministry of Water and Environment
Directorate of Environmental Affairs,
P. O. Box 20026
Kampala, Uganda

January 2013

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ACRONYMS

CBO	Community Based Organization
CCU	Climate Change Unit
CDM	Clean Development Mechanism
CFM	Collaborative Forest Management
CFR	Central Forest Reserve
COMFORT	Commercial Forestry Research and Training Group
CSO	Civil Society Organization
DFD	District Forestry Department
DFO	District Forestry Office
DFS	District Forestry Services
EAP	Energy Advisory Project
EMPAFORM	Strengthening and Empowering Civil Society for Participatory Forest Management in East Africa Programme
EU	European Union
FBE	Forest Based Enterprise
FD	Forestry Department
FIEFOC	Farm Income Enhancement and Forest Conservation Project
FMP	Forest Management Plan
FR	Forest Reserve
FSSD	Forestry Support Services Department
GDP	Gross Domestic Product
GoU	Government of Uganda
IGA	Income Generating Activity
JGI	Jane Goodall Institute
LFR	Local Forest Reserve
LG	Local Government
MAAIF	Ministry of Agriculture, Animal Industry and Fisheries
MDG	Millennium Development Goal
MFPED	Ministry of Finance, Planning and Economic Development
MGLCD	Ministry of Labour, Gender and Community Development
MoU	Memorandum of Understanding
MTEF	Medium Term Expenditure Framework
MTTI	Ministry of Tourism, Trade and Industry
MWE	Ministry of Water and Environment
NAADS	National Agricultural Advisory Services
NaFORRI	National Forestry Resources Research Institute
NDP	National Development Plan
NFA	National Forestry Authority
NFP	National Forest Plan
NFTPA	National Forestry and Tree Planting Act
NGO	Non-Government Organization
NORAD	Norwegian Agency for Development
NP	National Park
ODA	Official Development Agency
PA	Protected Area
PAF	Poverty Alleviation Fund
PEAP	Poverty Eradication Action Plan
PFO	Private Forest Owner
PFOA	Private Forest Owners Association
PMA	Plan for Modernization of Agriculture

REDD	Reducing Deforestation and forest Degradation
RPP	Readiness Preparation Proposal (for REDD)
SPGS	Sawlog Production Grant Scheme
SWG	Sector Working Group
TMF	Tropical Moist Forest
UBOS	Uganda Bureau of Statistics
UFSCS	Uganda Forest Sector Coordination Secretariat
UGX	Uganda Shilling
UWA	Uganda Wildlife Authority
WB	Work Bank
WR	Wildlife Reserve
WWF	World Wide Fund for Nature
ZARDC	Zonal Agricultural Research and Development Centre

FOREWORD

The Uganda Forests cover 3,604,176 ha, of which 17% consists of Central Forest Reserves(CFRs) managed by the National Forestry Authority(NFA), 18% consists of National Parks and Wildlife Reserves (NPs & WRs) managed by Uganda Wildlife Authority (UWA), 0.85% is jointly managed by NFA and UWA, and 0.03% are local forest reserves (LFRs) managed by respective LGs. The rest of the forests (64%) are on private and communal lands, and hence managed by private and local community forest owners.

The Uganda Forestry Policy (2001) has provided direction to the forest sector developments through specific forestry policy statements. The Uganda Forestry Policy (2001) recognises the importance of the development and sustainable management of forests on private land in gazetted areas, within urban areas for the provision of goods and services

However, the forest cover has continued to deteriorate. Within a period of 15 years from 1990, the forest cover had reduced by approx. 1.3 million ha, representing an average annual deforestation rate of 1.8%. The highest annual rate of deforestation is occurring on private and communal lands (2.2%) and the lowest is in National Parks and Wildlife Reserves (0.4%). The rate of deforestation in Central Forest Reserves was 1.1%. Unsatisfactory forest law enforcement and governance (FLEG), and institutional failures has been the major causes for the poor performance of the forestry sector

This National Forest Plan has been developed by Forestry Sector Support Department (FSSD) with financial support from FAO-NFP facility and FAO-Technical Support programme (TCP) grant to address the deteriorating situation in the forestry sector. It is a contribution to the implementation of the National Development Plan (2010) which placed forestry at the centre of Uganda's development agenda by categorizing it as a primary growth sector. The "Business Approach" in the NDP provides a re-orientation of forestry resource management with special attention to developing forestry-related enterprises.

The NFP has been refocused to portray this position. By recognising the role of forestry in national development today, the prospects for increased investment for forestry within the national budget and donor programmes, and through the private sector is becoming more favourable.

The plan is of little value if not used for implementing the strategies and action plans for supporting the forestry sector. Implementation of the plan will require efforts from many partners particularly those with interest in improving economic growth, prosperity and improved public service delivery through a sustainably managed forests.

The plan will support any person or organisation professionally obliged or personally interested to facilitate individuals or a group of people for the purpose of sustainable forest management in Uganda. It is envisaged that by using this plan, the forestry sector will focus on development of products and services which have high contribution towards social-economic transformation.

.....
Hon. Minister of State for Environment
M. Flavia Nabugere

ACKNOWLEDGEMENT

We appreciate this support given to the Government of Uganda to facilitate the process that will lead to the declaration and management of Community Forests.

The writing of this plan has benefited from the contribution of many individuals and organisations consulted. All the participants that participated in the regional and national workshops and reviewed the plan are recognised.

This National Forest Plan was prepared by CADMA Consult with financial and logistical support from the FAO-NFP facility grant in support to Forestry Sector Support Department (FSSD) formerly Forest Inspection Division (FID). CADMA Consult was assigned to review the 2002 NFP in order to bring it in line with Uganda's national development agenda as enshrined it its National Development Plan, and strengthen its contribution to implementation of Uganda's Vision 2035.

Greatest appreciation to CADMA Consult would have been when all those that contributed would have their names or organizations listed here as a token of appreciation but, for practical reasons, this is not possible. For all those who participated and cannot be personally mentioned here or in appendices 2(a), 2(b), 2(c) and 2(d) (list of participants consulted or those who participated in Regional and national workshops); please accept our sincere appreciations. However, there are names that would make this report incomplete if not mentioned in person:

From FAO Rome is Mr. Fred Kafeero, who has been instrumental during the initiation and review of the NFP. From FAO representation in Uganda, the staff led by FAOR, Mr. Percy W. Misika, Mr. Charles Owach, Ms Beatrice Okello, Ms Edith Rukundo are recognised for their coordination support during the review of this plan.

From MWE/FSSD are Mr. Onyango Gershom (Director Environmental affairs), Ms. R. Musoke (Commissioner for Forestry FSSD), Ms. Adata Margret (Assistant Commissioner FSSD), and Charles Byaruhanga (M&E officer FSSD) for their guidance during the process of reviewing the NFP.

Appreciation also goes to team that undertook the review; Langoya Council Dickson (Rural environmental Management specialist) for leading the team, Ensuring that the provisions of the NFP are environmentally sound and in line with economic growth, prosperity and rural development imperatives, quality assurance and final delivery of the report; Steve Nsita Amooti (Forest management specialist) for addressing the issue of sustainable forest management and forest degradation, overall revision process including compiling results from consultations and document reviews into the final form of the NFP ; Khaukha Stephen (Natural resources planning specialist) for addressing issues relating to FLEG and ensuring that the NFP is in line with Uganda's planning frameworks at national and LG levels. Also appreciated is Edward Mupada (Community Development specialist) for his guidance in Stakeholder mobilisation and consultations and participatory approaches during the plan preparation.

Whereas it is true that the CADMA Consult bears responsibility for whatever is presented in this report, the overall product is truly a concerted effort of all who participated, in big and small ways, towards production of this report. To all these, and the many more that are out there, CADMA Consult says, and say it sincerely, THANK YOU.

EXECUTIVE SUMMARY

The National Forest Plan (NFP) is a sector-wide national instrument for managing and utilising the forestry resources in Uganda. The first NFP was developed in 2002, in order to put into effect the Uganda Forestry Policy (2001). The policy and natural resources laws proceed from the Constitution, which recognises the strategic importance of forestry in national and local development.

Forests and trees contribute to national economic growth through various ways. The Forestry Policy, 2001 estimates contribution of forests to Gross Domestic Product (GDP) to be 6%. In 2004, Glenn Bush *et al* estimated the total economic value of Uganda's forests at UGX 593.24 billion (USD 300 million). He also estimated the annual contribution of forests to household cash income at 11-27%, and the contribution to ecosystem services (soil and water management, carbon sequestration, and future uses for Uganda's biodiversity) at UGX 222 billion (USD 110 million). According to Uganda Bureau of Statistics (UBOS), 92% of Uganda's energy needs are met from woody biomass, with rural households consuming about 97% of the household energy requirements. 34.4 million tonnes of roundwood worth UGX 258.4 billion or USD 130 million was used in construction work in 2007.

Why the Revision

During the eight years of implementation of the NFP (2002), new developments in the forestry sector, and the national landscape as a whole necessitated a new strategic direction for the sector. In recognition of this, the National Development Plan (NDP, 2010) placed forestry at the centre of Uganda's development agenda by categorizing it as a primary growth sector, alongside other sectors like agriculture, tourism, industry, and oil & gas. The NDP also required all ministries, departments, and autonomous & semi-autonomous entities to realign their development priorities with the NDP. New opportunities for financing sustainable forest management (SFM) from forest revenues had emerged. Non-traditional forest revenue sources like good markets through forest certification, ecotourism, carbon emissions reductions, artefacts and bee products were emerging.

On the challenge side, the institutional framework that came with the forest sector reform had not delivered in many of the prescribed functions as had been envisaged in 2002. Other emerging issues that necessitated a revision of the 2002 NFP included population growth (which rose from 24.2 million in 2002 to 31.8 million people in mid-2010), increased demand for forest products as a result of sustained GDP growth (average annual growth of 7.5% between 2002 and 2008), and the emerging global forest-related instruments like the Non- Legally Binding Instrument on All Types of Forests, and Reducing Emissions from Deforestation and Forest Degradation (REDD+).

On the negative side, the forest cover had continued to deteriorate. Within a period of 15 years from 1990, the forest cover had reduced by approx. 1.3 million ha, representing an average annual deforestation rate of 1.8%. The highest annual rate of deforestation is occurring on private and communal lands (2.2%) and the lowest is in National Parks and Wildlife Reserves (0.4%). The rate of deforestation in Central Forest Reserves was 1.1%.

Unsatisfactory forest law enforcement and governance (FLEG), and institutional failures emerged as the major causes for the poor performance of the forestry sector (contributing 54 and 32 percent respectively of all the reasons given by stakeholders). Inadequacies in FLEG included flouting of policies, laws, & plans, inadequate stakeholder participation in implementation of the NFP, and little attention given to natural forest management. Institutional failures were mainly due insufficient attention given by Government and its Development Partners to the District Forest Departments which were directly responsible for 70% (had reduced to 64% in 2005) of the country's forests, and the Forestry Sector Support Department (FSSD), which was responsible for supervising the activities across the forestry sector.

THE REVISED NATIONAL FORESTRY PLAN, 2011/12 – 2021/22

Basis of the Plan

The NFP revision has been shaped mainly by the policy & legal framework, the inter-governmental arrangements arising out of various international forestry policy dialogues, other related sector plans, needs of target beneficiaries, and the provisions of the NDP (2010), among others.

The NDP emphasises "…*sustainable development through preservation of natural resources such as forests and wetlands* …" Accordingly, the NDP places forestry at the centre of Uganda's development agenda by categorizing it as a primary growth sector. Key NDP forestry objectives are:

- Restoring forest cover back to the1990 levels by 2015
- Restoring degraded natural forests in forest reserves and private forests
- Reducing pressure on forest cover as a source of woodfuel and construction materials
- Promoting forestry based industries and trade

Vision, Goal and Objectives of the Plan

The Vision of the Forestry Sector is ***"A sufficiently forested, ecologically stable and economically prosperous Uganda"*** and the Goal is ***"An integrated forest sector that achieves sustainable increases in economic, social and environmental benefits from forests and trees by all the people of Uganda, especially the poor and vulnerable".***

The strategic objectives are to:

1. Increase economic productivity and employment through forest production, processing and service industries
2. Raise incomes for households through forest-based initiatives;
3. Restore and improve ecosystem services derived from sustainably managed forest resources

Investment Priorities

In line with the NDP, the forestry sector will focus on promoting the development of products and services which have high contribution towards accelerated social-economic transformation. Accordingly, the following products and services will be promoted under this NFP:

1. High grade timber and associated products
2. Firewood and charcoal (household, commercial and industrial)
3. Construction and industrial poles
4. Tree seed and planting materials
5. Non-wood forest products (rattan, bamboo, etc)
6. Fruit trees
7. Bee products
8. Water catchment services
9. Biodiversity products (e.g. herbal medicine, wild coffee)
10. Ecotourism (the forests – water – landscape connection)
11. Carbon sequestration services
12. Ecological functions through sustainable forest management using forest certification standards
13. Aromatic oils

In order to realise the products and services above, the NFP will focus investments in the following priority areas:

1. Planted trees and forests
2. Restoration of degraded natural forests
3. Promotion of forest-based industries and trade
4. Forest law enforcement and governance
5. ICT in forest management

Programmes and Strategies

Based on the priorities listed above, investment will be channelled into the following programmes:

Core programs	Support programs	Cross-cutting issues
Programme 1: Development of commercial forest plantations Programme 2: Promotion and intensification of tree growing on-farm Programme 3: Restoration and conservation of natural forests Programme 4: Forest product processing and value addition Programme 5: Promotion of Urban Forestry	Programme 6: ICT in forest management and advisory services Programme 7: Forestry Education and Training Programme 8: Forestry research Programme 9: Supply of quality tree seeds and planting materials Programme 10: Forest sector institutional development and coordination Programme 11: Forest law enforcement and forest governance Programme 12: Forest financing and resource mobilization Programme 13: Forest certification	1. Gender 2. HIV/AIDS 3. Environment 4. Climate change

Under each of the Programmes above, the following strategies have been elaborated:

<u>Programme 1: Development of commercial forest plantations</u>

1. Expand and sustainably manage commercial timber and pole plantations
2. Establish and sustainably manage energy plantations
3. Encourage development of community-based out-grower forest plantation schemes around large plantations

<u>Programme 2: Promotion and intensification of tree growing on farm</u>

1. Support establishment and management of woodlots, hedgerows, windbreaks and shelter belts
2. Promote on-farm growing of high conservation value species

<u>Programme 3: Restoration and conservation of natural forests</u>

1. Restore / rehabilitate degraded and deforested natural forests in CFRs and wildlife conservation areas
2. Promote the restoration / rehabilitation of natural forests on private and communal lands

3. Restore / rehabilitate water catchment areas and fragile ecosystems (bare hills, river banks, lakeshores)
4. Build capacity for community based natural resource forest management and collaborative forest management
5. Promote the development of natural forest related enterprises
6. Promote conservation of biodiversity in priority forest reserves and wildlife conservation areas
7. Promote management of important biodiversity corridors on private and communal land.

Programme 4: Forestry product processing and value addition

1. Promote small and medium capacity sawmills with high recovery rates
2. Improve harvesting and processing practices for higher revenue returns from natural forests
3. Build the capacity for value addition for processing wood and non-timber forest products

Programme 5: Promotion of urban forestry

1. Mainstream forestry in urban development plans
2. Manage urban forest reserves
3. Increase urban tree growing and protection
4. Support urban tree nurseries to produce quality planting materials

Programme 6: ICT in Forest Management and Advisory Services

1. Develop and implement user-friendly information management systems to collect, process and disseminate forest information
2. Develop and implement a forestry sector communication strategy
3. Establish national and regional forestry stakeholders consultative fora for information sharing and review of forestry sector performance
4. Build the capacity of service providers (NGOs, private consulting & contracting companies, etc.) to effectively deliver forestry services
5. Promote energy saving technologies in wood deficient areas and high population centres
6. Build the capacity of local community institutions to demand for forestry advisory services

Programme 7: Forestry education and training

1. Develop and periodically review curricula for professional and technical forestry training to enhance knowledge, attitude and skills
2. Conduct tailored apprenticeship and on-job training for staff of NFA, DFS, FSSD and other forest related organizations to improve their performance
3. Promote farmer field schools and agro-forestry demonstrations
4. Build knowledge, attitude and skills of service providers for effective delivery of forestry services
5. Promote and strengthen the integration of forestry related co-curricular activities in primary and secondary education

Programme 8: Forestry Research

1. Develop and implement Strategic Plans for Forestry Research and Development through relevant research institutions
2. Undertake species trials for indigenous trees to inform diversified plantation development
3. Promote research on-farm
4. Promote research by forest management institutions
5. Develop and implement a tree improvement programme
6. Undertake specific studies to fill information gaps
7. Develop and implement mechanisms for transfer of technologies

Programme 9: Supply of quality tree seed and planting materials

1. Improve tree seed procurement, testing, storage and distribution
2. Establish and maintain quality tree seed sources

3. Produce quality tree seedlings and other planting materials
4. Promote the multiplication and use of indigenous species
5. Develop a Seed Certification Scheme

Programme 10: Forest sector institutional development and coordination

1. Improve the capacity of FSSD, NFA and DFS in terms of staffing, skills, equipment, etc for better performance of their mandates
2. Improve coordination, networking and partnerships for all forestry sector stakeholders
3. Improve sector monitoring and evaluation
4. Promote domestication, coordination and implementation of regional and international forestry related multi-lateral environment agreements
5. Promote the participation of private sector institutions and communities in forest management

Programme 11: Forest Law Enforcement and Forest governance

1. Strengthen the development, dissemination and implementation of relevant forestry policies, regulations, standards and guidelines, and the periodic reviews thereof
2. Prepare and implement participatory Forest Management Plans
3. Restore the physical integrity of forests in protected areas
4. Promote professionalism among forestry practitioners (codes of ethics, skills, professional standards)
5. Develop the capacity of CSOs and local communities to contribute to FLEG and hold government institutions accountable
6. Strengthen collaborative forest management partnerships for improvement of the wellbeing of forest-edge communities
7. Increase collaboration and coordination between formal forestry institutions and law enforcement agencies

Programme 12: Forest Financing

1. Mobilize conditional grants for forestry management by local governments
2. Operationize the Tree Fund provided for under the law to support tree growing initiatives at local government and community levels
3. Develop economic instruments (financial, taxes, green levies, payment for ecosystem services, etc) for funding forest management
4. Increase the economic productivity of natural forests in order to generate incomes for re-investment
5. Develop innovative (e.g. expanding landscape tourism, botanical gardens, butterfly farming, value addition, etc) to diversify incomes/revenue sources
6. Promote corporate social responsibility initiatives that support tree growing and natural forest management
7. Mainstream tree planting in all public and private sector development programmes
8. Promote private-public partnerships to enhance forest sector financing
9. Mobilize long-term low-interest finance from pension funds, insurance and financial institutions for forest developers

Programme 13: Forest Certification

1. Develop systems for independent verification of legal sources of marketable forest products
2. Establish and support a National Working Group under the auspices of the Forest Stewardship Council (FSC)
3. Develop the national standards, criteria and indicators in accordance with FSC SFM principles and generic criteria & indicators
4. Publicize and develop markets for the forest certification initiative
5. Manage selected natural forests and plantations for production according to SFM principles in a phased manner

6. Organize and encourage PFOs (of both plantations and natural forests) to produce for the markets that take products from forests managed under the certification scheme
7. Build the capacity of public and private tree growers, PFO organisations and individuals to implement SFM principles

Financing Arrangements for the National Forest Plan

The total budget over the ten years of the NFP is UGX 915.219 billion (USD 415 million), progressing with the intensity of activities from UGX 23.9 billion (USD 10.89 million) in the first year, and reaching UGX 159.7 billion (USD 72.6 million) in the 10th year. 41% of the budget will be funded by Government (including Development Partners funding through line government ministries and local governments), 44% will be funded by the private sector, and 15% through civil society organisations. These funds will be mobilised through:

- Increased capacity to generate revenues from the forest products through value addition and diversification
- Payment for environmental services, especially through carbon sequestration and watershed protection services
- Private sector sources (domestic and external)
- Public funds, including Official Development Assistance
- Government instruments like guaranteeing loans and tax relief for the private sector
- Public-Private Partnerships, especially in commercial timber and energy plantations
- Long-term loans from pension & insurance funds, and development banks

PART 1:

REVIEW OF THE 2002 NATIONAL FORESTRY PLAN

1.0 INTRODUCTION

1.1 Background and context

The National Forest Plan (NFP) is a sector-wide strategy for managing forestry resources in Uganda. The first NFP was approved by Cabinet in October 2002 as one of the outcomes of the Forest Sector Reform process that was initiated in1996 by the then Forestry Department, and further developed by Government through the Uganda Forestry Sector Coordination Secretariat (1999 – 2004). The other major outcomes of the reform included the Uganda Forestry Policy (2001), the National Forestry and Tree Planting Act (2003), and a new institutional arrangement to replace the Forest Department. This arrangement devolved the responsibilities and functions for forestry sector management to the following institutions:

- Forestry Sector Support Department (initially Forestry Inspection Division) as the technical arm of the Ministry responsible for forestry.
- National Forestry Authority (NFA) to manage Central Forest Reserves (CFRs),
- District Forestry Services (DFS) to promote responsible management of forests outside the protected areas (PAs)

Through the Uganda Forestry Policy (2001), Government sets out the direction for managing the sector, through prescribing the sector vision, goal, guiding principles and policy statements. The Policy was agreed upon through a lengthy consultative process with key agencies, organizations and individuals at national, district and local levels across the sector. The NFP was developed to put into action the provisions of this policy.

1.2 Forest Sector Vision, Goal and Objectives under NFP (2002)

The Forestry Policy (2001) provides the sector Vision and Goal which were adopted by the NFP (2002). These are described below.

Vision:

The Vision of the forestry sector in Uganda is, *"A sufficiently forested, ecologically stable and economically prosperous Uganda"*.

Goal:

The goal of the forestry sector is, *"An integrated forest sector that achieves sustainable increases in economic, social and environmental benefits from forests and trees by all the people of Uganda, especially the poor and vulnerable"*.

Objectives:

The objectives of the NFP conformed to the then national planning framework, the Poverty Eradication Action Plan (PEAP), now replaced by the National Development Plan (2010). The main focus was on the management of tree and forest resources for the economic, social and environmental benefits for all the people of Uganda, in line with the pillars of PEAP. To this end, the NFP was designed to improve the livelihoods of Ugandans, especially those living in rural areas through raising the incomes of the poor people, increasing the number of jobs and enhancing the contribution of forests to Uganda's economic development, while ensuring that the future of the country was not jeopardized in the process.

As the new strategic planning framework for turning the forestry policy into action, the NFP provided the following strategic objectives to contribute to the achievement of the sector Vision and Goal.

(i) To raise incomes for households through forest-based initiatives, targeting improvement of the well-being of small-scale, largely rural stakeholders;
(ii) To increase economic productivity and employment in forest industries, targeting large-scale, commercial investors;
(iii) To restore and improve ecosystem services derived from sustainably managed forest resources

1.3 The Need to Revise National Forest Plan, 2002

The NFP was designed as a ten-year rolling strategic development plan for the forestry sector, and hence would expire in 2012. However, the Ministry of Water and Environment (MWE) recognized new developments which had occurred in the forestry sector and the national landscape as a whole, which necessitated a new strategic outlook for the sector. Some of the changes are described below.

a) **The national planning framework has changed** from a "poverty eradication" approach to the "National Enterprise" approach, which is the main philosophy in Uganda's National Development Plan (NDP), 2010. The NDP requires that ***"…all ministries, departments, and autonomous and semi-autonomous entities will realign their development priorities with the NDP"*** (Republic of Uganda, 2010). The NDP also places forestry at the centre of Uganda's development agenda by categorizing it as a primary growth sector, alongside other sectors like agriculture, tourism, industry, and oil & gas. The NFP must therefore be refocused to portray this position. The recognition of the role of forestry in national development today offers favourable prospects for increased investment for forestry within the national budget and donor programmes, and through the private sector.

b) Uganda's **population has continued to increase at an average of 3.2% annually**, rising from 24.2 million in 2002 to 31.8 million people in mid-2010 (UBOS, 2010). With the increasing population, there is greater demand for land for agricultural expansion, increased pressure on forest lands, and increased consumption of forest products like timber, charcoal, & firewood. Therefore, the strategies for the management and conservation of forests and trees urgently need to be recast to address the increasing demands.

c) Uganda's **Gross Domestic Product (GDP) grew at an average of 7.5%** between 2002 and 2008 (UBOS, 2009). Such growth meant that the various sectors (e.g. construction, energy for small & medium-scale processing industries, and farmland) which use forest products increased their demand, thus escalating pressure on forest resources and forestlands.

d) **New opportunities** for financing sustainable forest management (SFM) from forest revenues have emerged. For example, forest products and services which were not prominent as generators of forestry revenues are now becoming more marketable and a promising source of income for the forest owners. The non-traditional forest revenue sources emerging today include ecotourism, art & crafts, bee products, carbon, and biodiversity, among others. An emerging non-forest source of investment funds is corporate social responsibility among large private companies (mainly with international connections) and national statutory bodies.

e) The **institutional framework** that came with the forest sector reform has not delivered in many of the prescribed functions as had been envisaged:

- The **Forestry Sector Support Department (FSSD)** is still struggling to recruit staff, nine years down the road. Further, government funding from the Consolidated Fund has not been as forthcoming as had been anticipated. This has rendered the FSSD poorly equipped to execute its policy and legal mandate of oversight and coordination of the entire forestry sector. FSSD has been able to support only some districts through the Farm Income Enhancement and Forest Conservation Project (FIEFOC).

- The **National Forestry Authority (NFA)**, charged with management of central forest reserves (CFRs) did well during its first four years, but later it became dogged with problems of governance. In addition, NFA failed to achieve financial self-sufficiency by the 4th year of its existence, as had been anticipated, and it is still highly dependent on external support. This has now been exacerbated by the fact that the timber plantations, which provided the bulk of its internal revenues, are depleted.

- **The District Forestry Offices (DFOs)** of local governments (LGs) are still struggling to find means of effectively implementing their mandate of supervising management of forests on private lands. During the sector reform, Government decentralised this responsibility for supervision of forest management without a proportionate decentralisation of financial resources.

- It was also envisaged that **Private Forest Owners (PFOs)** with registered forests would operate as "Responsible Bodies", along with NFA, LGs, and communities with registered communal forests. However, there is no private or community forest that has been registered since the National Forestry and Tree Planting Act (NFTPA) was enacted in 2003. In spite of this, the private sector is now more vibrant than it was in 2002. Private investment in commercial timber plantations is fast gathering pace, largely due to the realisation that timber and related products will soon become precious commodities as the sawlog stock in the country runs out. There is also growing interest among small tree growers to establish woodlots. The private natural forests on the other hand have received little attention, and are rapidly being converted to agricultural production.

f) **Emerging global forestry-related instruments and markets,** especially the international initiative on Reducing Emissions from Deforestation and Forest Degradation (REDD+), which was formally agreed during the Bali Climate Conference in 2007. The international community is now actively engaged in developing the REDD+ operating mechanisms. Uganda is preparing plans to take advantage of REDD+ to benefit from restoration of natural forests and other conservation & SFM activities. Also emerging are global markets that are responsive to products harvested from forests under sustainable management standards, especially forest certification.

In view of this changing landscape, the Ministry of Water and Environment (MWE) considered it necessary to revise the NFP, to bring it in line with the current Uganda's national development agenda, while recognizing the international cooperation arrangements that are emerging.

1.4 The Revision Process

The process of revising the NFP took a consultative and participatory approach, combined with expert opinions of consultants and members of the National Technical Committee which reviewed the work of the consultants. The review process was cognizant of the fact that the implementation of the revised plan would involve a highly diverse stakeholder landscape. Therefore, the participatory process also served to prepare the stakeholders for the actual implementation of the NFP. The revision was done mainly through the following activities:

Review of Documents

Various relevant documents were reviewed, including national and sectoral strategic plans, as listed in **Appendix 1**

Key Informant Interviews

The interviews of key informants were conducted covering a wide range of forestry-related institutions, including central government Ministries, Departments and agencies, LGs, Development Cooperation Partners, Civil Society Organisations (CSOs) and the private sector. The list of the stakeholders interviewed is shown in **appendix 2 (a)**

Administration of a Questionnaire

The open-ended questionnaires were administered to various stakeholder groups, including central and LG officials, the private sector, forestry-related civil society groups, researchers, and trainers.

Specific studies

The NFP revision process benefited a lot from parallel studies and processes on forest governance, REDD+, Forestry sector review, forest financing, enhancing stakeholder participation, forestry partnerships and benefit sharing, ICT in forest governance, etc.

Regional stakeholders' workshops

The stakeholders at sub-national and community level were consulted through two major regional workshops. The list of participants in the regional workshops is shown in **appendix 2(b).**

Peer reviews

The multi-stakeholder Technical Committee **(Appendix 2(c)** set up by the Ministry of Water and Environment reviewed the drafts respectively. In between, drafts were circulated to a wider range of stakeholders for comments. Therefore, stakeholders were kept engaged progressively in the revision process.

National stakeholders' workshop

A national consultative workshop was conducted to validate the draft NFP. The list of participants in the regional and the national workshops is shown in **appendix 2(d).**

2.0 FORESTRY IN NATIONAL ECONOMIC GROWTH AND DEVELOPMENT

2.1 General Information about Uganda

Uganda covers a total surface area of just over 24 million hectares (ha), 17.3% of which is covered by open water and swamps. As of 2005, forests and woodlands covered just over 3.6 million ha or 18% of the land area (Uganda Bureau of Statistics [UBOS], 2009). **Table 1** summarises the basic information about Uganda.

Table 1: Basic Information about Uganda

Latitude	4°12'N & 1°29'S
Longitude	29°34'E & 35°0'W
Minimum altitude above sea level	620 metres
maximum altitude above sea level	5,110 metres
Total surface area	241,550.7 km2
Land Area	199,807 km2
Area under water and swamps	41,743 km2
Average temperature	15-31oC
Average rainfall	735 -1863 mm/year
Per capita GDP at constant (2002) market prices (UBOS, 2006)	UGX 646,477 (US$ 360)[1]
GDP growth rate at constant (2002) market prices (2008/09)	7 percent
Contribution of agriculture (including forestry) to GDP at constant (2002) market prices	15.1 percent
Contribution of forestry to GDP at constant (2002) market prices	2.6 percent[2]
Total population (2009 mid-year)	30.7 million
Percentage of females (2002)	51 percent
Percentage urban (2009 mid-year)	14.8 percent
Percentage of forest cover (2005)	15 percent
Percentage of people living below the poverty line (2005/06	31.1 percent
Population growth rate	3.2%

Source: Uganda Bureau of Statistics,(2009)

2.2 Economic Value of Uganda's Forests

Bush, Nampindo, Aguti and Plumptre (2004) estimated the total economic value (marketable and non-marketable values) of Uganda's forests at UGX 593.24 billion (USD 300 million). However, the estimation of the contribution of forests to the national economy in Uganda still presents both conceptual and methodological challenges. In general, it is believed that the contribution of forests is routinely underestimated. Some of the challenges in forest evaluation include:

- Forests produce multiple products that make it difficult to assign values to some of the products.
- Forests produce many non-market products and services. Forests have provided safety nets against shortages of food, fuel, income and against ill-health, especially during times of natural or economic shocks that perpetuate vulnerability and poverty.
- Timber and some other forest products result from biological processes that take a very long time to realize.
- Scientific data on forest production functions is inadequate.

[1] Statistical Abstract, Official Middle Exchange Rate, 2002: US$ 1 = UGX 1797
[2] A study by Glenn Bush et al, 2004, which included the total economic values of forests, put the contribution of forestry to GDP at 5.2%

- Many forest products and services are important to the livelihood of the rural poor, but these products have little weight in organized commodity markets.

2.3 Contribution to Gross Domestic Product

The forestry sector's contribution to the Gross Domestic Product (GDP) by economic activity at current prices was estimated at UGX 1,038 billion, of which, UGX 418 billion was monetary and UGX 619 billion non-monetary (UBOS, 2009). Based on this, the percentage share of GDP made by the forestry sector was 3.5% (1.4% monetary and 2.1% non-monetary). The trends for the period 2004/05 – 2008/09 are shown in **Table 2**.

Table 2: GDP Share (at current market prices)

Economic Activity	2004/05	2005/06	2006/07	2007/08	2008/09	Average
Agriculture, forestry & fishing	***25.1***	***24.1***	***22.3***	***21.2***	***23.7***	***23.3***
Cash crops	1.8	1.9	1.9	2.3	1.8	1.9
Food crops	15.5	14.5	12.6	11.1	13.7	13.5
Livestock	1.8	1.6	1.5	1.6	1.8	1.7
Forestry	3.5	3.4	3.5	3.6	3.5	3.5
Fishing	2.7	2.7	2.8	2.7	2.9	2.8

Source: Adapted from UBOS (2009)

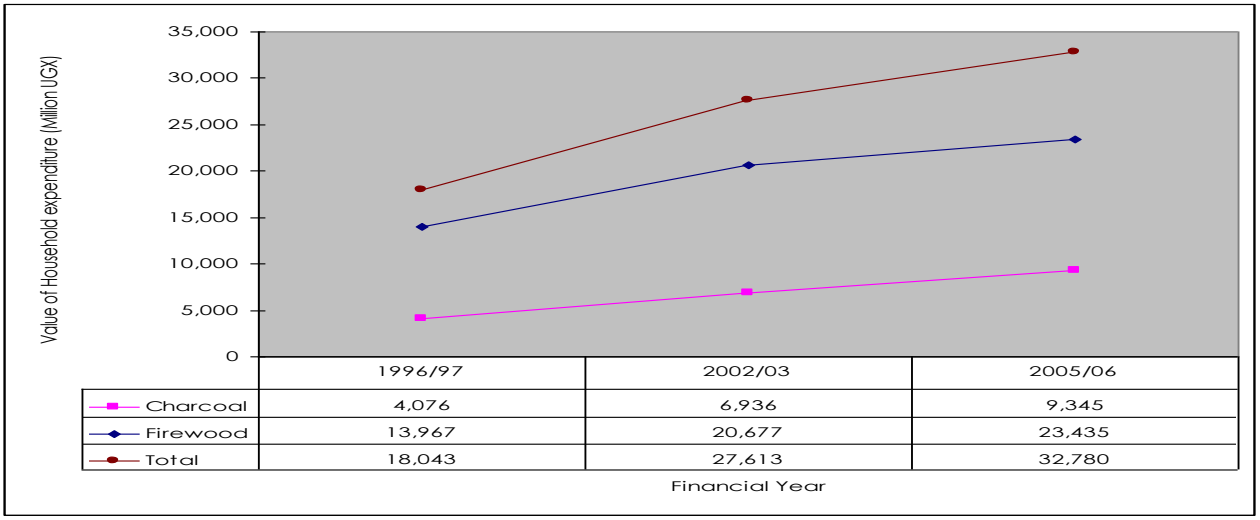
However, these figures exclude values of benefits from forestry services like watershed protection, biodiversity conservation, sequestration of greenhouse gases, and control of soil erosion. In addition, other forestry contributions which can be monetised are also accredited to other sectors. For example, ecotourism is accredited to the Tourism Sector, while value-added timber is accredited to the construction and manufacturing sectors (UBOS, 2009).

Consequently, other studies that have taken a Total Economic Value (TEV) outlook have independently estimated the sector contribution to GDP closer to 6% (MWLE, 2001, Bush, Nampindo, Aguti and Plumptre, 2004).

2.4 Woody Biomass Energy

Biomass is the dominant energy resource for households, and small & medium scale industries such as lime, brick and tile making and a number of agro-based industries. 92% of Uganda's energy needs are met from woody biomass (Republic of Uganda, 2010). UBOS (2009) indicated that the nominal value of household expenditure on firewood and charcoal (in both monetary and non-monetary terms), increased from 18 million tonnes in 1996/97 to 32.8 million tonnes in 2005/06, or 82 percent increase over a period of 9 years. The value of charcoal consumption more than doubled, while the value of firewood consumption for the same period increased by 68 percent **(Figure 1).**

Figure 1: Value of Firewood and Charcoal Consumption at Household Level (million Shillings)



Source: Adapted from UBOS (2009)

2.5 Round-wood for the Construction Sector

Forests and trees are an important source of construction materials in Uganda by providing timber, poles, ropes, and other construction materials. Over 42% of dwelling units in Uganda use mud and poles for the walls of dwelling units, and 98% of the dwelling units use timber or poles (with iron sheets or grass-thatch) as a component for roofing (UBOS, 2006). The construction industry has grown at an average rate of nearly 13% annually during the period 2004/05 - 2008/09 (UBOS, 2009), with direct consequence of increasing demand for the forest products.

2.6 Contribution to Household Incomes

Forestry still contributes a lot to the livelihood of the great majority of Ugandans, mostly in the informal economy. Forestry has continued to form a large part of the informal sector through sale of firewood, charcoal, furniture, craft materials, fruits, seedlings, honey, etc.

In the life of the NFP various efforts have been undertaken to help the poor gain more access to forestry resources through agroforestry and community planting by NGOs, government and donors but access to resources still eludes many among the poor as seen from the increasing distances to collect firewood and growing scarcity of other products like timber.

2.7 Contribution to Amelioration of the Effects of Climatic Change

Forests and trees help to mitigate the effects of climate change. Opportunities for payment for mitigation of the effects of climate change through the Clean Development Mechanism (CDM) and more recently, REDD+ have emerged on the international scene. The product traded is carbon. Uganda can greatly benefit through these opportunities in terms of generating income for the forest owners.

2.8 Employment in the Forest Sector

The forest sector is an important employer in Uganda, especially in rural areas. The Government estimates that the forest sector employs about 1 million people. 100,000 of these are employed in the formal sector (Forest Policy 2001). During the period 2004-2007, 21,000 ha of plantation has been established leading to an additional 10,000 permanent jobs & another 15.000 part time jobs, which translates into UGX 20 billion (USD 12.1 million) (Kaggwa, R; Hogan, R. and Hall, B (2009a).

Future trends show that employment in the forestry sector is going to increase considerably in the area of plantation establishment. By 2025, about 100,000 jobs will have been created **(Table 3)** from forest plantations alone.

Table 3: Future Trends in Job Creation from Industrial Forest Plantations

Year	Area to be Planted (ha)	No of Jobs	Value
2008	6,100	3,050	5,490,000,000
2009	6,200	3,100	5,580,000,000
2010	6,760	3,380	6,084,000,000
2011	7,390	3,695	6,651,000,000
2012	8,020	4,010	7,218,000,000
2013	8,650	4,325	7,785,000,000
2014	9,280	4,640	8,352,000,000
2015	9,910	4,955	8,919,000,000
2016	10,540	5,270	9,486,000,000
2017	11,170	5,585	10,053,000,000
2018	11,800	5,900	10,620,000,000
2019	12,430	6,215	11,187,000,000
2020	13,060	6,530	11,754,000,000
2021	13,690	6,845	12,321,000,000
2022	14,320	7,160	12,888,000,000
2023	14,950	7,475	13,455,000,000
2024	15,580	7,790	14,022,000,000
2025	16,210	8,105	14,589,000,000
	196,060	**98,030**	**176,454,000,000**

Source: Calculated from NFA Records

2.9 Forests and Trees as Safety Nets

Forests have provided safety nets against shortages of food, fuel and income and against ill-health (especially important at times of natural or economic shocks that perpetuate vulnerability and poverty). Vulnerability to natural calamities however increased in areas where forests have been cleared resulting in landslides, famine, poor health and suffering. A sad example is the Bududa disaster of 2010 in which hundreds of residents died and many were displaced due to the landslides.

In 2002 it was estimated that 15% of the population of Uganda live in parishes that neighbour forest reserves. Many other people (two or even three parishes away) also use these resources, This scenario has not changed and as a result many millions of farmers use trees on-farm for firewood, poles or as part of their farming systems and sell a variety of tree products like poles, timber, fuelwood and charcoal for basic income in the home.

2.10 Contribution of Forests to Other Sectors

The forestry sector is crucial for the productivity and survival of other sectors. Forests, woodlands and trees render ecological services and support to agriculture, livestock production, industry, water, energy, health, wildlife, and tourism among others, These services are often taken for granted or are poorly understood. Virtually all forest reserves (FRs), i.e. over one million hectares serve the important functions of protecting biodiversity, water catchments, riverbanks, lakeshores and stabilising of steep slopes (NFA, 2005).

Water sector

Forests play a key role in protecting water catchments, ensuring sustainable supply of water for domestic consumption, industrial use and generation of energy. Access to safe drinking water has been rising, standing at 61% (UBOS, 2006) due to drilling of boreholes, protection of wells & springs, and treatment of water from open reservoirs. All these sources are dependent on watersheds that are protected by forests. The value of watershed protection services is estimated at UGX 160 billion annually, considering only the aspects domestic water consumption in the community around the natural forests (Glenn Bush, et. al, 2004). The downstream costs of the effects of erosion or siltation of surface water sources further down the catchment and the impact of eutrophication on fisheries have not been included.

Agriculture sector

Forests and trees play a key role in servicing agriculture through regulation of underground water flows, stopping soil erosion and improving soil fertility. For example, on average there is 14 cm more topsoil on forested hillsides, trees can add up to 150kg of nitrogen per hectare, increasing maize yields up to 5 times (MWLE, 2002).

Tourism development

Some of the CFRs also offer important tourist attractions, especially cherished by those who love nature in its rustic form.

Manufacturing sector

In the small to medium manufacturing industries, woody biomass is the main energy source for small & medium scale industries such as lime, brick and tile making, and a number of agro-based industries (UBOS, 2009)

Forests also support the production of hydro-electric power by contributing to maintenance of the hydrological cycle. The deforestation in the lake's catchment areas partly contributed to the reduction in water levels of Lake Victoria in the mid-2000s, leading to the lowering of hydro-power output in the mid-2000s. As a result, the manufacturing sector was severely affected, with its GDP growth dropping from 10.8% in 2004/05 to 4.5% in 2005/06 [MoFPED, 2006]. Most manufacturers were consequently forced either to reduce production or to continue using generators leading to high production costs.

Forests are a source of raw materials for the manufacturing sector (e.g. honey, fruits, medicines and aromatic products). There is a big potential for bio-diversity enterprises to contribute to industrial development and competitiveness that is yet to be tapped. For instance, herbal medicines are beginning to make inroads into the medicine chests of homes, especially as the Natural Chemotherapeutics Research Laboratory progresses in validating the medicinal properties of many tree and shrub species.

3.0 FORESTRY RESOURCES MANAGEMENT AND TRENDS

3.1 Management of Forests

General Forest cover

Forests cover 3,604,176 ha , of which 17% consist of CFRs managed by the NFA, 18% consists of National Parks and Wildlife Reserves (NPs & WRs) managed by Uganda Wildlife Authority (UWA), 0.85% is jointly managed by NFA and UWA, and 0.03% are local forest reserves (LFRs) managed by respective LGs. The rest of the forests (64%) are on private and communal lands, and hence managed by private and local community forest owners. **Table 4** shows how the forests are distributed among the Responsible Bodies.

Table 4: Management of Land Cover (including forests) in Uganda

Land Cover	Local Governments (LFRs)	NFA (CFRs)	UWA (NPs & WRs)	Joint NFA &UWA	Private Land	Total
Plantations Hardwoods	335	4,863	52	0	9,536	14,786
Plantations softwoods	19	14,091	2,430	0	2,201	18,741
THF- Normal	123	246,860	249,192	23,468	81,312	600,957
THF-Low Stocked	120	36,715	1,810	0	153,049	191,694
Woodlands	614	325,422	389,664	7,279	2,055,019	2,777,998
Bush lands	413	188,332	316,994	11,417	2,451,519	2,968,675
Grasslands	202	179,469	765,652	44,233	3,074,026	4,063,581
Wetlands	296	9,073	33,966	2,196	707,511	753,041
Subsistence farmlands	2,725	161,514	60,857	741	8,621,755	8,847,592
Commercial Farmlands	6	2,977	928	56	102,662	106,630
Built up areas	118	1,084	2,263	0	93,807	97,270
Water	24	889	14,744	149	3,690,684	3,706,489
Impediments	0	1,145	729	116	5,814	7,804
Total Area of category	**4,995**	**1,172,433**	**1,839,278**	**89,657**	**21,048,895**	**24,155,259**
Forest Cover in category	**1,211**	**627,951**	**643,148**	**30,747**	**2,301,117**	**3,604,176**
Forest % in that category	**0.03**	**17**	**18**	**0.85**	**64**	**100**

Source: NFA, 2009

The line Ministry responsible for the oversight and coordination of forestry developments in the country is the Ministry of Water and Environment (MWE), through the FSSD as its technical arm. However, the wildlife conservation areas are under the Ministry of Tourism, Trade and Industry.

The Permanent Forest Estate

About 9% of the total land area of Uganda (or 1.9 million ha) constitutes Uganda's permanent forest estate (PFE) covering CFRs, LFRs and forested areas in NP & WRs (Uganda Forestry Policy, 2001). In NP & WRs, the main functions of the PFE are ecological & biodiversity protection. The forests also play an important role of bolstering ecotourism, especially in terms of chimpanzee and gorilla ecotourism. In CFRs, the functions also include production of forest goods & services to meet economic & social needs of society. **Table 5** shows the areas in CFRs serving these functions.

Table 5: Categorising Central Forest Reserves by Function

Category	No. of CFRs	Total Area (ha)	Remarks
Ecological and biodiversity importance	353	1,074,000	Protection of steep slopes, water catchments, river banks, lakeshores and wetlands
Industrial forest plantations	108	151,200	Mainly in the cattle corridor
CFRs for production of assorted forest goods & services	136[3]	45,597	Small CFRs, especially suited for small-scale investments
Total	**506**	**1,270,797**	

Source: NFA Records

However, it must be noted that the CFRs of ecological and biodiversity importance also provide goods and services under a zoning scheme that sets aside about 20% of the natural forests as strict nature reserves, 30% as buffer zones and 50% as production zones (Forest Department, 2002).

Forests and trees on private and communal land

The Forestry Policy (2001) places privately and communally owned forests under "forestry on private land". They include Tropical Moist Forests (TMFs), Other Wooded Lands on privately and communally owned lands and forest plantations. They may be registered or not, found in licensed CFR areas or not, declared as community forests or not (MWE, 2007). By 2005, private forests covered 2.3 million hectares or 64% of Uganda's total forest area.

According to the National Forestry and Tree Planting Act, 2003 (NFTPA), PFOs are Responsible Bodies for managing their own forests, as long as the forests are registered. It should be noted that very little planned management is taking place in private forests. Establishment and management of private commercial timber plantations are beginning to pick up, after years of declining stocks. This has been made possible by incentives of start-up capital extended to private sector plantation growers by the Sawlog Production Grant Scheme (SPGS) funded by the European Union and more recently, by the Norwegian Government.

3.2 Changes in Forest Cover in Uganda

Forest area

In 1990, the area of natural forests and woodlands was estimated at 4.9 million hectares, representing 24% of the land area (NFP, 2002). However, as of 2005, this area had reduced to just over 3.6 million ha or 18% of the land area (NFA, 2009). Hence within a period of 15 years, the forest over had reduced by approx. 1.3 million ha (or a loss of 27%). **Table 6** gives the trends categorized under each forest management institution.

Table 6: Trends in forest cover (1990-2005)

Management Ownership	Forest area in 1990 (ha)	Forest area in 2005 (ha)	Loss of forest area (ha)	% loss of forest area
Local governments (LFRs)	1,628	1,211	417	25.6
NFA (CFRs)	752,143	627,951	124,192	16.5
UWA (NPs, WRs,	679,724	643,148	36,576	5.4
Joint NFA and UWA	37,560	30,747	6,813	18.1
Private land	3,462,923	2,301,117	1,161,806	33.5
Total	**4,933,978**	**3,604,174**	**1,329,804**	**27.0**
Percentage of total land area	**24%**	**18%**		

[3] Includes all the 91 LFRs covering an area of 4,997 hectares

The highest loss of forest cover was registered on private forests, (approximately 1.2 million hectares, representing a loss of 33.5% over the 15 years). But even within the protected areas (PAs)[4] there was a significant loss of 168,000 hectares (about 11.4%), being highest in CFRs (124,000 hectares), followed by the wildlife conservation areas (43,000 ha) and local forest reserves (417 ha).

Deforestation and Forest Degradation

Uganda's forest cover consists largely of woodlands and tropical moist forests and plantations. Over the 15 years, the average annual rate of deforestation was 1.8%. The reduction of vegetation cover over the period was most pronounced in woodlands (29 percent change in area), followed by TMFs- low stocked (26 percent), broad leaved plantations (21 percent) and THF – well stocked (17 percent). **Table 7** gives an outline of the changes.

Table 7: Forest Cover Change (1990 – 2005)

Year/ Land cover/use	Broad leaved Plantations	Conifer Plantations	TMF well stocked	TMF low stocked	Wood land	Total Forest Cover
1990	18,682	16,384	650,150	274,057	3,974,102	4,933,746
2005	14,841	18,766	540,289	201,644	2,818,921	3,594,462
Change in Area	-3,841	2,382	-109,861	-72,413	-1,155,181	-1,339,284
Annual change (ha)	-256	53	-2,256	-5,776	-83,667	-91,919
% Change in Area	-21%	15%	-17%	-26%	-29%	-27%
% Change per year	-1.37%	0.97%	-1.13%	-1.76%	-1.94%	-1.81%

Source: NFA (2009)

The relatively lower rate of deforestation of TMFs is partly because priority was over the years placed on the management of the large forests like Mabira, Budongo, Kalinzu, Maramagambo and Bugoma, because of their economic and biological diversity values. In addition, these large forests are easier to protect because of their size. In most of the CFRs which had sustained management activities by the former Forestry Department, and later NFA, forest restoration was realized. For example, NFA inventory records showed that overall gross volume for trees of dbh 50 cm + in the production zones of Budongo CFR increased from 86.9m3/ha in 1992 to 88.5m3/ha in 2006(over a period of 14 years). In Mabira, the formerly encroached areas were substantially restored with a young forest consisting of 46 TMF species, within 16 years after the encroachers left (about the same period referred to in the Budongo inventory above). These examples show that with improved management, the natural forests can recover.

However, in areas like Mayuge, Mubende and Kiboga Districts, large tracts of natural forests, including nature reserves, have been converted into agricultural land through encroachment, which has made their management difficult. Most of the small TMFs have been decimated.

There has been general increase in the forest plantation area, although the rate of planting does not match with the overall deforestation rate. Between 2002 and 2008, an area of 35,000 hectares of new plantations was established, over 70% of which is by the private sector (NFA Records, 2009).

The causes of loss of forest cover continued to be over-harvesting of forest products, forest clearance for agriculture, overgrazing, urbanisation, and industrial development. Encroachers in CFRs (for rural settlements, agriculture, and urban expansion) increased from 180,000 people in 2004/05 to 220,000 a year later (NFA, 2006). The problems were exacerbated by the rapid population growth (average 3.2% annually), which exerts pressure on the forestry resources.

[4] Protected Areas include forest reserves, national parks and wildlife reserves

Further, the institutions like NFA that are mandated to play a lead role in the sector have shown poor governance, which reduces their effectiveness in meeting the challenges of implementing the good policies and enforcing the good laws.

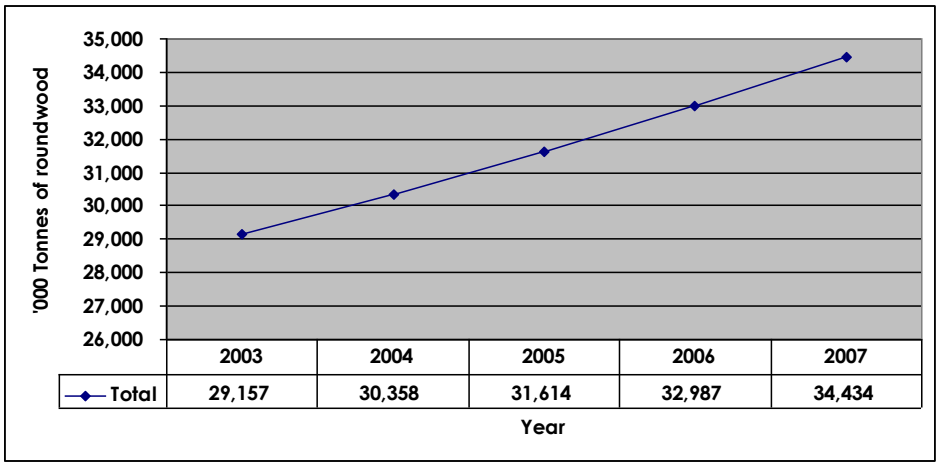
More serious deforestation and forest degradation has taken place in the central districts of Uganda where there are intense economic activities like agricultural expansion, brisk firewood and charcoal trade, a fast-growing furniture industry, and small-scale manufacturing industries like bakeries, and brick making. In general, limited capacity in districts has contributed to poor control of access and exploitation of the private and community forests. Therefore, over-exploitation and creaming off of high timber value species is very common in these forests, with virtual disappearance of species like mahoganies and mvule.

3.3 Consumption of Forest Products

Roundwood

Uganda registered a steady increase in the total roundwood production over the period 2003 to 2007 and this trend is likely to continue into the future **(Figure 2)**.

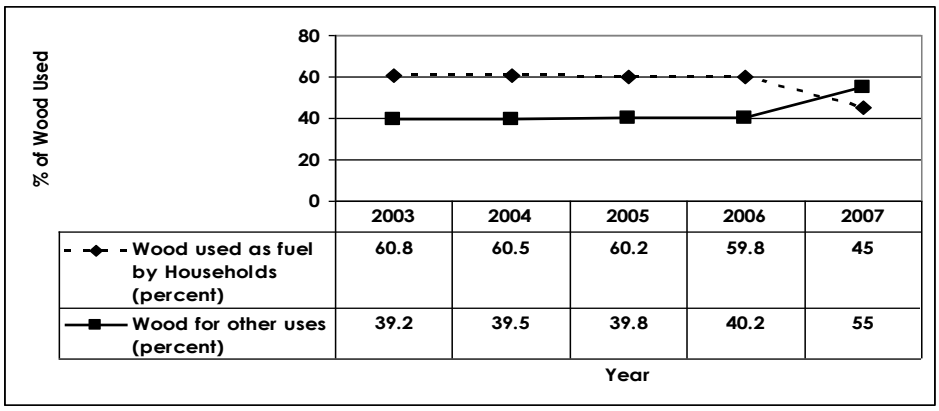
Figure 2: Amount of Roundwood Produced in 2007



Source: UBOS, 2009)

The booming construction industry (growing at an average annual rate of 13% from 2004/05 – 2008/09) and inadequate supply of the alternative sources of fuel has pushed up the demand for wood consumption in commercial, industrial and other use sectors, which in 2007, surpassed wood used as fuel by households (UBOS, 2009). **Figure 33** shows the proportions of wood used as fuelwood and wood put to other uses.

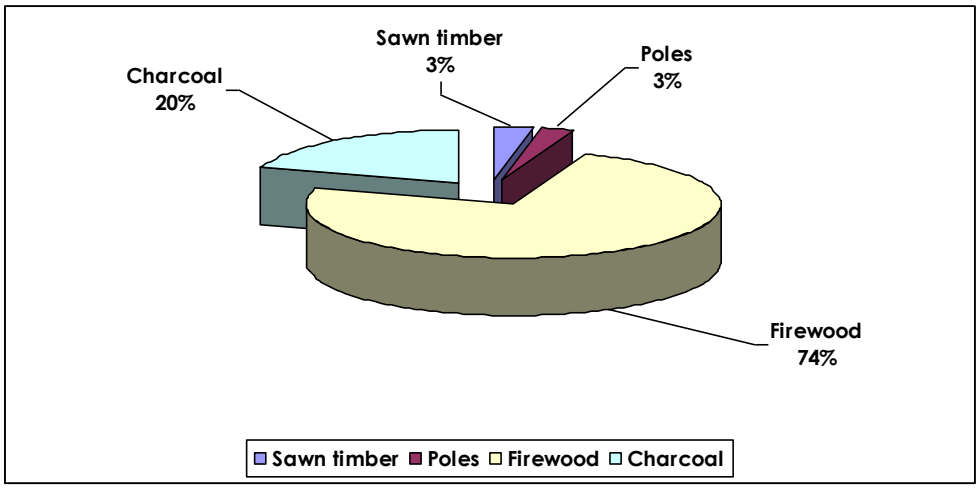
Figure 3: Wood fuelwood and other wood uses by percentage of total, 2003 - 2007



Source: UBO S (2009)

Roundwood production in 2007 was used mainly as firewood, charcoal, sawn timber and poles. Fuelwood (firewood and charcoal) accounted for the lion's share (94%), while sawn timber and poles each accounted for 3% of the total wood used **(Figure 44).**

Figure 4: Roundwood production in 2007



Data Source: UBOS (2009)

Sawn timber

The volume of recorded timber harvested and moved by licensed pitsawyers jumped from 55,000M^3 during FY 2004/05 to 100,000M^3 during FY 2005/06 (NFA Annual Report, 2005/06). When the timber that goes unrecorded is factored in, timber consumption in the country during 2005/06 reached around 300,000M^3. This was equivalent to approx. 900,000M^3 of roundwood annually generating about US$ 50 million. These figures reflect the demand for timber on the domestic market since the timber volumes imported are insignificant. On the other hand, annual allowable cut of roundwood from natural forests in CFRs stands at about 53,000m3 (NFA, 2008). Mature timber plantations are virtually exhausted. The same applies to timber from private natural forests.

As effectiveness in law enforcement and governance increased, official revenue collection progressively rose nearly 16 times from 1995/96 to 2005/06. On the other hand, revenue from impounded timber sold by public auction progressively dropped from 25% of total revenue in 1995/96 to 8% in 2005/06. This shows that people reverted to legitimate business as law enforcement and governance improved.

Firewood and charcoal

The national annual consumption of biomass energy in form of charcoal increased from 6 million M^3 in 1994 to 11 million M^3 in 2007. In addition, national consumption of firewood was estimated at 32.8 million M^3 annually (NDP, 2010), showing a growing demand on the dwindling biomass resources in the country and limited access to alternative sources of energy.

By 2002, about 73 % of all the districts in Uganda were already experiencing a deficit of accessible woody biomass for fuelwood (NFA, 2009). This can only have gotten worse given that population has increased from 24 million in 2002 to just over 30.6 million in 2009 (MoFPED, 2009). The result is that people walk longer distances to collect firewood, or use poor alternatives such as crop residues. The supply of electricity is still limited and not affordable to most rural & urban poor and middle income groups.

Most of the charcoal is consumed in urban centres. According to Forest Department records (FD, 1995), charcoal consumption in all urban centres was estimated at 270,000 tonnes annually, valued at UGX 31.4 billion (USD 31.4 million). Based on population increase, charcoal consumed in all urban centres was estimated in 2006 to be 463,437 tonnes, valued at UGX 141.8 billion (USD 79 million), indicating growing production & trade in both volume & value of charcoal (Kaggwa, et al 2009a). As the services sector such as hotels and restaurants grows (substantial growth rate of 9.6% in 2005/06), the demand for firewood and charcoal will also continue to rise.

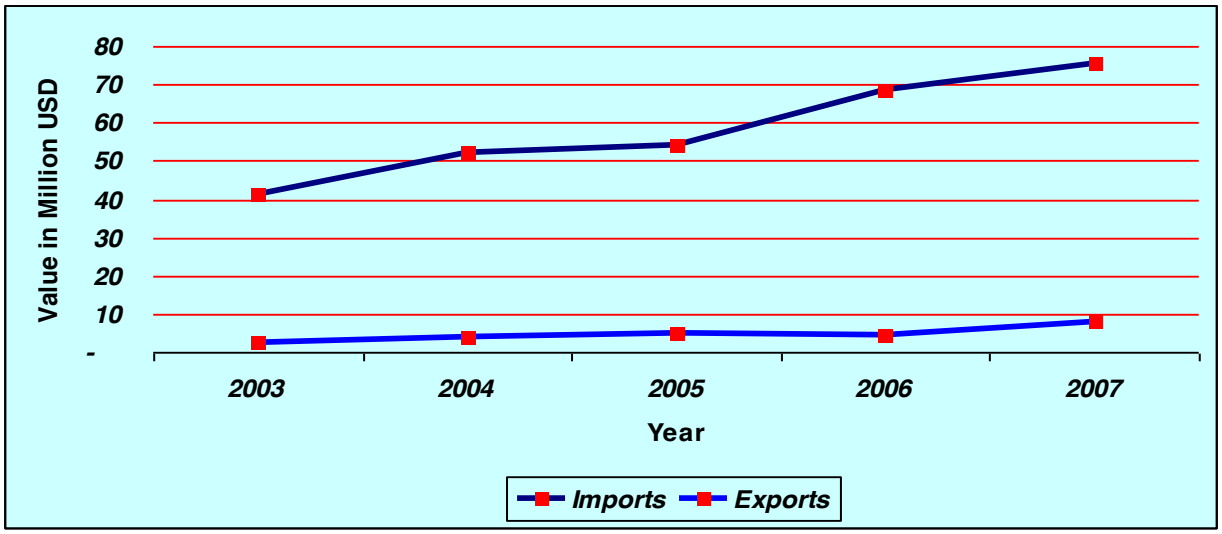
Transmission poles

The market for high quality **transmission poles** is increasing: annual consumption of transmission poles (wet poles) rose from 7,500 in 1999, valued at UGX 225 million (USD 141,000), to 25,000 in 2008, valued at UGX 1 billion (USD 606,000) - (Kaggwa et al, 2009a}.

3.4 External Trade in Forestry Products

In terms of external trade, Uganda is a net importer of forestry products, and the gap between the imports and exports has been widening **(Figure 5).** This has important implications for the forest industry in Uganda.

Figure 5: External Trade in Forestry Products, 2003 – 2007: **Source of Data: ,UBOS (2008)**



3.5 Investments in private forest development

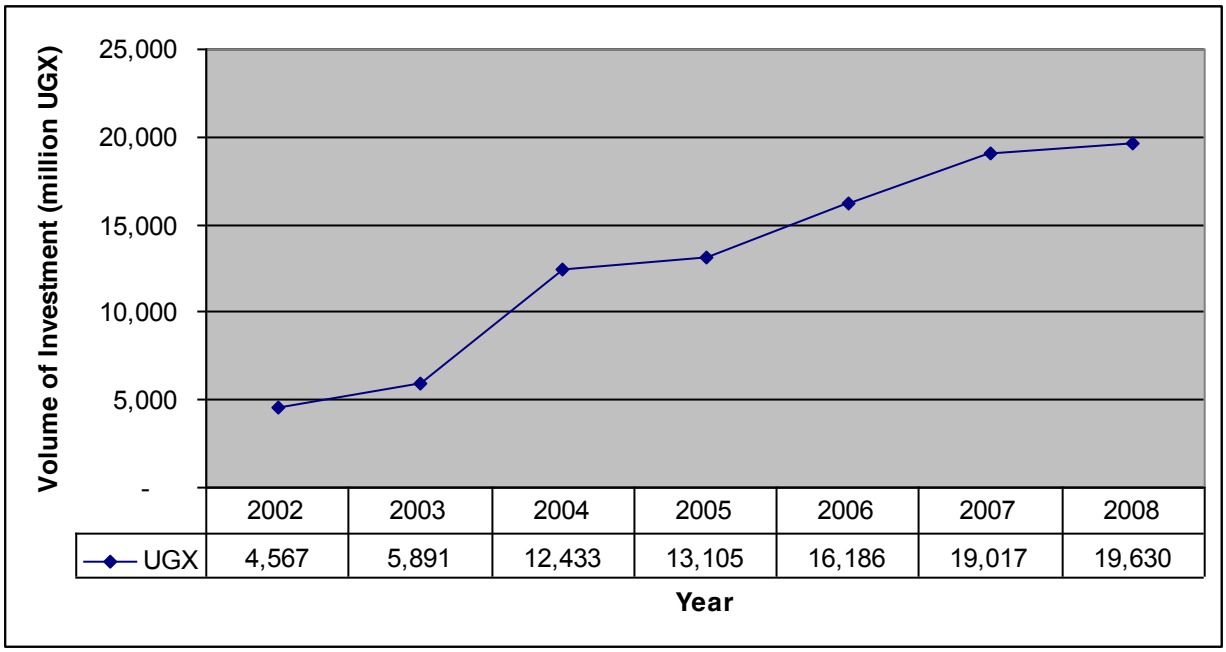
Investment in Forestry

In the natural forests, there are no records to show investment trends by PFOs but anecdotal information indicates that the PFOs have invested very little in deliberate forest management. Recently, the African Development Bank and the Nordic Fund, is funding the Farm Income Enhancement and Forest Conservation (FIEFOC) Project which is providing assistance to PFOs to plan for and manage their forests, especially those located in watersheds. In addition, some NGOs under the umbrella of the Uganda Forestry Working Group, have been supporting PFOs to develop forest-based enterprises (FBEs) as an incentive towards planned management of their forests

For the PAs, the main investment has been from official development assistance (mainly European Union, the Norwegian Government and the World Bank). This support has helped to bolster the local revenues being collected by NFA and UWA.

There has been a tremendous growth of interest in commercial forestry by medium and small scale tree growers since the inception of the NFP in 2002. The larger portion of investment is from donor funds (European Union, Government of Norway, World Bank, Africa Development Bank), but there has also been growing capital injection by the private sector. In the period 2002 to 2008, the private sector invested Ushs 90 billion in commercial forestry (NDP, 2010). The trend in private sector investment in commercial forest plantations is shown in **Figure 66**.

Figure 6: Annual Progress in Timber Plantation Investment by the Private Sector through Funding from Domestic Sources (2002 – 2008)



Source: Adapted from Kamugisha-Ruhombe, (2010)

To-date nearly 149,000 ha of CFRs has been licensed to private tree growers. However, the actual area planted so far is about 10%.

4.0 ASSESSMENT OF THE PERFORMANCE OF THE 2002 NFP

Evaluation of performance of the NFP was set against its impact on the PEAP II (2002/03 – 2004/05). However, for purposes of this assessment, the forestry indicators for PEAP III (2005/06-2007/08) have also been included. The assessment has also been based on the performance towards the achievement of the NFP programmes and the Millennium Development Goals (MDGs).

4.1 Performance against PEAP-Based Indicators

(i) Indicator: Percentage of land under quality forests cover increasing

(ii) Indicator: Reversed rate of deforestation, increasing tree cover on-farm

Achievements

- The land under forest cover reduced from 4.9 million ha (24% of the total land area) in 1990 to 3.6 million hectares (18%) in 2005 (NFA, 2009). This is a total loss of forest cover of 1,329,804 ha (or 27%) between 1990 and 2005
- The biggest loss of forest cover has been on private land - 1,161,806 ha

Challenges

- The forest cover data is outdated given that there has been a lot of forest loss between 2005 and 2010. Update requires elaborate and expensive satellite imagery and ground truthing.
- Forest encroachment remains the biggest threat to forests in PAs

(iii) Indicator: Area of FRs under productive forest management by the NFA and local governments increasing, through better control and management

Achievements

- Forest management plans (FMPs) covering all the 506 CFRs have been prepared in a participatory manner, and are being partially implemented. Only 5 FMPs have been approved by the Minister
- Community Action Plans and FMPs for all LFRs are in progress with support of FIEFOC. All districts do not have District Forestry Development Plans.
- Some forest management technologies for plantation and natural forests (nurseries, plantation establishment, restoration of degraded natural forests and yield regulation) have been developed for sustainable forest management practices
- 4,000km out of 11,000 Km of boundaries had been opened by 2008. About 800km of the opened boundaries had been verified using registered surveyors.
- 21,000 ha of new quality timber plantations worth US$ 37.5 million, were established by NFA and the private sector during the period 2004/05 – 2006/07.

Challenges

- All FMPs have not been approved by the Minister responsible for forestry as required by the law
- Boundary re-opening, demarcation and maintenance exercises in many forest reserves are still challenged by local people.
- Lack of, or limited appropriate technologies for processing forest products (adding value), and management and processing of non-timber forest products undermines efficiency in forest utilization and management control
- Encroachment continued to be the main obstacle to private investment in forest plantations

(iv) Indicator: Value of commercial investment in forestry businesses increasing

Achievements

- Nearly 149,000 ha has been licensed to private tree growers in CFRs, 69% of this was licensed by NFA between the years 2005 and 2009, as a strategy to increase private sector investment in plantation development.
- The number of seedlings sold by NFA in 2007/08 was about 3 million, up from 70,000 sold by its predecessor (FD) in between 2003/04, representing over 300% increase within a period of four years. Eighty percent (80% of the seedlings raised in the country were for industrial forest plantations (pine and Eucalypts).

Challenges

- There is no information on private small and medium scale forestry enterprises (such as nurseries, bee-keeping, fruit tree growing, woodlots, etc, and yet they have significant contribution to household incomes and peoples well-being;
- It is difficult to access investment finance for commercial forestry business, due to the long term nature of the business, among other reasons. It takes at least 10 years to receive returns on capital;
- Encroachment of most of the forest reserves allocated for commercial plantations development is a big disincentive to investors, including NFA

(v) Indicator: Volumes and values of forest products traded (domestic and international) increasing

Achievements

- Total roundwood production increased from 29,157,000 tonnes in 2003, worth UGX 218.8 billion (c. USD 110 million) to 34,434,000 tonnes worth UGX 258.4 billion (c. USD 13 million)

Challenges

- There is no system for capturing data on forest products trade.
- There are no records on export of forest related products
- The quality of forest products is still low and cannot easily attract buyers on the international market.

(vi) Indicator: Number of people and wage rates (by gender, socio-economic group, geographic location) in forestry-related employment increasing in the formal sector

Achievements

- Over 1 million people are employed by the forest sector (MWE, 2001).
- 10,000 permanent jobs and another 15,000 part-time jobs created through establishment of 21,000 ha of new plantations

Challenges

- Inadequate centralised data to update the information contained in the 2001 Forestry Policy
- No data available to enable segregation of the employment numbers into gender

(vii) Indicator: Value and percentage contribution of forestry to GDP increasing through higher production & value addition

Achievements

- Forestry contributes 6% of the GDP

Challenges

- Forest valuation needed to establish the real value of Uganda's forests.

(viii) Indicator: Number of effective CFM agreements in FRs increasing

Achievements

- Since 1997 when CFM started, it has grown to cover sites in 43 CFRs, involving 85 CFM groups. The process started off sluggishly with only two CFM agreements signed by 2004 (for Budongo and Tororo CFRs). By end of 2010, 25 CFM agreements had been signed, while 60 were at various stages of development (WWF, 2010)
- FBEs, including bee-keeping, craft making and fruit growing have been initiated as income-generating activities (IGAs)

Challenges

- Communities have not yet substantially benefited from the implementation of CFM agreements
- The Forestry Policy and law are not specific on benefits that should accrue to communities under CFM arrangements

(ix) Indicator: Number and areas of community forests increasing

Achievements

- Three pilot programs initiated in Masindi District under the provisions of the Communal Land Associations enshrined in the Land Act, 1998.
- National guidelines on establishment and management of community forests are in place

Challenges

- Extension services through the DFS to community forest owners have been inadequate
- Land tenure in some parts of the country is a hindrance to expansion of community forests.

(x) Indicator: Open access to public information on forestry increasing, through improved communications and popular participation

Achievements

- There is increased participation of the civil society in forestry information gathering and dissemination
- The Uganda Forestry Working Group (an alliance of NGO/CBOs with forestry-related mandates) have simplified, reproduced, translated, and distributed forestry publications such as the Uganda Forestry Policy, National Forest Plan, National Forestry and Tree Planting Act, and CFM Guidelines, among others
- Studies carried out by NGOs (on, for instance, forest governance, commercial forest plantation, management of private forests, CFM, and forest-based enterprises), have been used as a basis for lobbying and advocacy
- Access to public information, through the semi-autonomous NFA is easier than it was under the then Forestry Department (FD), and NFA staff are more accessible to the media to discuss forestry-related issues,

Challenges

- The flow of forest research information to the civil society has remained slow resulting in inadequate up-to-date literature for constructive lobbying and advocacy.
- Some information regarding sensitive matters like corruption in high places is still withheld from CSOs and other stakeholders

(xi) Indicator: Percentage of household income derived from different forestry-related enterprises increasing

Achievements

- 11 - 27% of household cash incomes of communities around FRs was derived from forestry (Glenn Bush, et al 2004)
- The share of total annual household income from forests has increased by 4 percent since sector reforms of 2000 (Jagger, P. 2008)
- The share of income from forests has declined by 10.7% for the poorest households and increased by 11.6% for the wealthiest households (Jagger, P., 2008)

Challenges

- No subsequent studies conducted to establish the trend in forest-related incomes.
- Poor people in rural areas find it difficult to access markets.

(xii) Indicator: Number of NAADS contracts for forestry advisory services increasing

Achievements

- Percentage of forest-related enterprises funded under NAADS has improved from 0 – 3% between 2003 to 2007 (FSSD, 2007)

Challenges

- There has been slow progress due to limited awareness about the economic returns of forestry, the long-term nature of tree growing, and lack of demonstrable successes in forest-based investment

(xiii) Indicator: Number of poor people with tree-growing permits in FRs increasing

- 2,350 people licensed to grow trees in CFRs had actually planted trees, areas varying between one and over 1,000ha per licensee.
- Most of the investors in commercial forest plantations are small to medium scale (up to 500 ha) tree growers constituting 99.8% of the number of investors in commercial forest plantations. This category of investors has planted 15,104 ha, which is 69% of the planted area, indicating that tree growing is becoming an attractive small to medium-scale enterprise, even if payback is long-term (Global Mechanism, 2009)

Challenges

- The high investment costs in establishment of plantations
- Investment finances for the small-scale commercial tree growers are still largely sourced from personal savings

(xiv) Indicator: Number of farmers using improved agroforestry technologies increasing

- Traditional agroforestry is the most practiced technology (used by 35%), followed by boundary planting (10%), woodlot establishment (7.4%), alley cropping (1.4%) and hedgerows (1.2%) of the rural communities (FSSD, 2007)
- Only 20.7% of the households in the sample taken attempted modern agroforestry practices[5] on their farms, especially with respect to integrating food crops with trees (FSSD, 2007)

[5] Deliberately and systematically planting trees among crops and in pasture on farms

(xv) Indicator: Distance to collect fuelwood halved within 10 years

- 97.4% of households in rural areas use firewood for cooking (FSSD, 2007)
- On average, the distance travelled to collect firewood has increased from 0.73 Km (in 2000) to more than 1 Km (FSSD, 2007). In some districts like Kitgum, Nebbi, Gulu/Amuru, Nakasongola, Lira, Sironko and Adjumani districts, the households travel more than 4 Km to collect firewood and this is done largely by women and children.

Challenges

- 73 % of all the districts in Uganda were experiencing a deficit of accessible woody biomass for fuelwood (NBS, 2003)
- 58.9% of the firewood used is obtained from woodland forests (mainly in Mbarara, Lira, Nakasongola, Kumi and Adjumani Districts) and 34.6% is collected from plantation/planted forests (mainly in from Masaka, Bushenyi and Kasese Districts) (FSSD, 2007)
- 3.4% of the people use plant residues for cooking, mostly in Eastern Uganda districts, such as Iganga and Kamuli Districts (FSSD, 2007). This has far-reaching effects on soil fertility because nutrient recycling through these residues is hampered, leading to reduced agricultural productivity, and the need to apply expensive artificial fertilizers

(xvi) Indicator: Number of households and businesses using improved biomass energy technologies

Achievements

- From the FIEFOC survey (FSSD, 2007), on average, a household uses 150Kg (2-3m^3) of fuelwood per month.
- The use of energy saving stoves like the improved household stoves of Rocket Lorena type has increased especially in urban areas,
- The Ministry of Energy and Mineral Development through the Energy Advisory Project provided technical and other advisory support to stove producers
- NGOs ad community-based organisations (CBOs) have been instrumental in disseminating the improved stove technologies
- The Ministry of Energy developed a strategy for sustainable charcoal production and licensing targeting 14 charcoal producing districts. However, this has not been implemented.

Challenges

- Improved household cooking stoves are not extensively disseminated due to their costs, lack of awareness and a variety of social-economic barriers.
- Even where they are disseminated, there is poor actual application of the technology, with many individuals still preferring the three-stone technology.

4.2 Performance against Forest Policy and NFP Programmes

General Performance

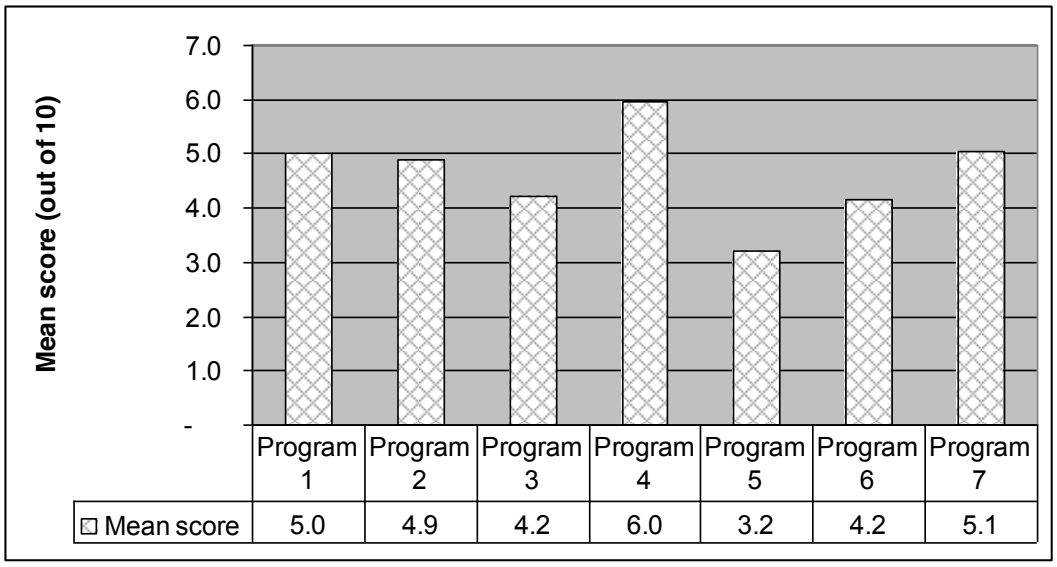
The Uganda Forestry Policy (2001) provides direction to the forest sector developments through specific forestry policy statements. The National Forest Plan (2002) developed strategies, organized into relevant programmes, for the realization of the policy statements. The NFP programmes were assessed through a participatory process to gain a general stakeholder impression about their performance over the period 2002-2010. The results presented below are the voices from the stakeholders.

The perception of stakeholders about the performance of the various NFP programmes was assessed using relevant central themes, as indicated below.

Programme	Central theme assessed
1. Enabling institutions	• General oversight and performance of forestry developments
2. National agencies	• investments in management of PFE • partnerships for management of PFE
3. District Forest Services	• provision of support services
4. Private Sector Development	• commercial forestry
5. Urban Forestry	• urban forestry
6. Forestry Research	• Research
7. Forestry Education	• Training

The perception of the respondents was assessed on a scale of 1 (lowest) to 10 (highest). **Figure 7** shows the results of how the stakeholders viewed the performance of each programme with respect to the central theme.

Figure 7: Performance of the National Forest Plan, 2002



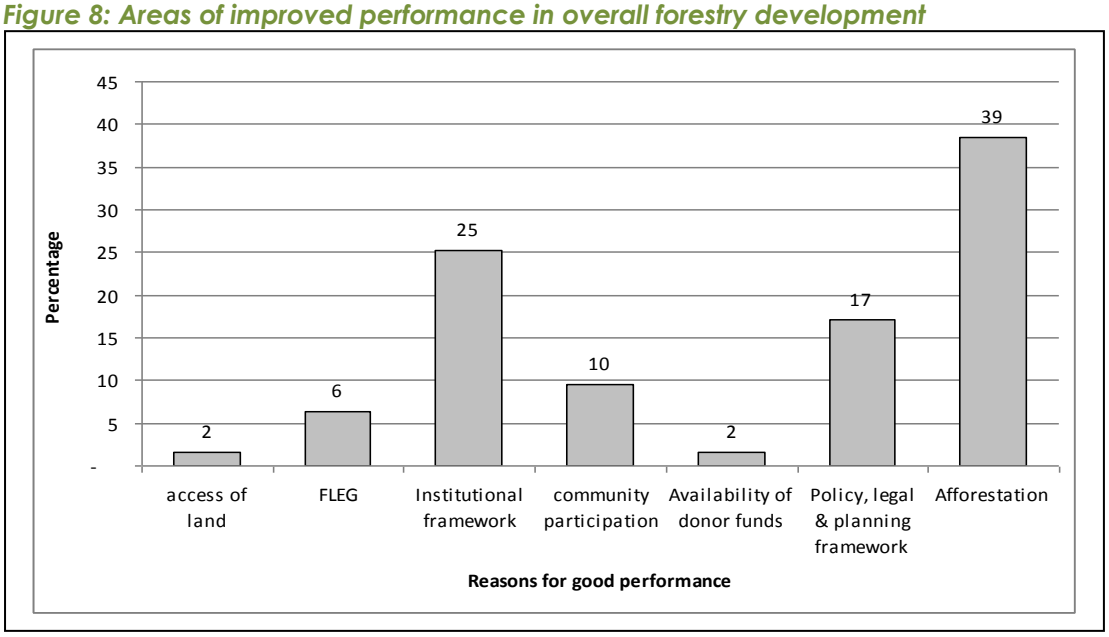
Source: Questionnaire on Stakeholder Perceptions

Performance for Programme 4 (Private Sector Development) was ranked the best with a mean score of about 6.0 out of 10, followed by Programme 7 on forestry training with a mean score of 5.1, Programme 1 on enabling agencies (Mean score = 5.0) and Programme 2 on national agencies. Urban forestry was ranked the lowest (Mean score = 3.2).

Overall, the performance of NFP programmes indicates that there were some areas of good and poor performance. Several factors were identified as contributing to the positive performance, as indicated in **(**

Figure 8**8).**

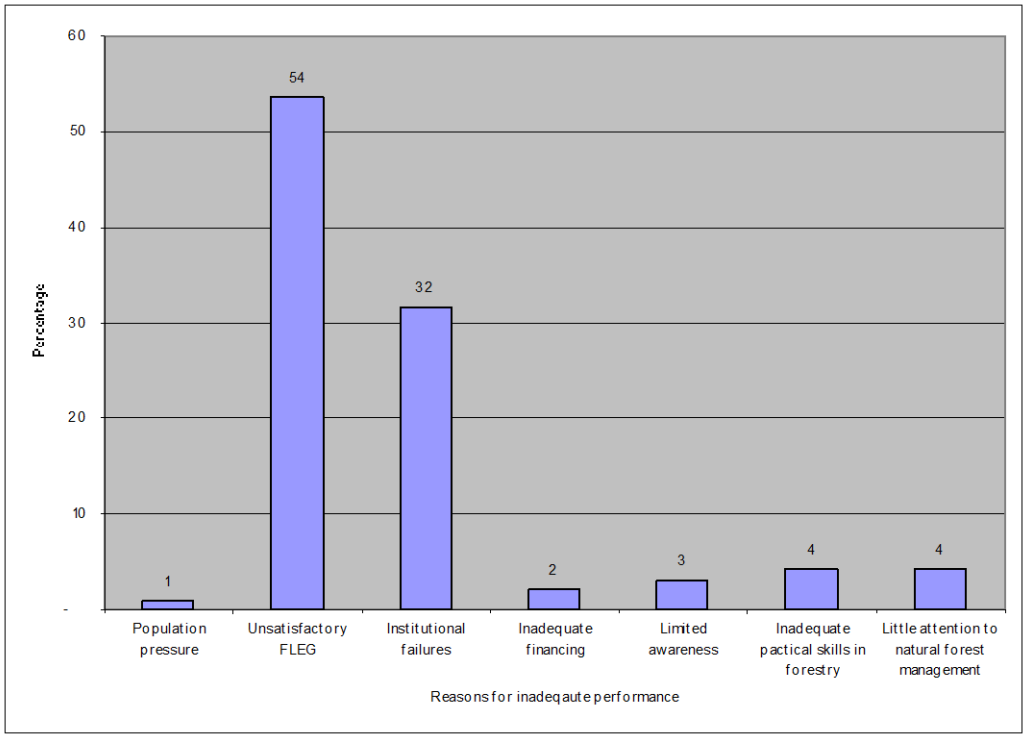
Figure 8: Areas of improved performance in overall forestry development



Afforestation was mentioned by 39% of the respondents as the reason for good performance of the forestry sector. This was followed by institutional set-up (25%), and policy, legal and planning framework (17%), as other key success factors. The stakeholders noted that there was increased afforestation, especially through commercial forestry and establishment of woodlots by the private sector. They were also happy about the current institutional set-up, consisting of the MWE/FSSD, NFA and DFS as key institutions in the sector. The forestry policy, planning and legal framework was also considered to be strong to support forestry developments.

On the other hand, the stakeholders also felt that the sector had not performed well in a number of areas as analysed in **Figure 9.**

Figure 9: Reasons for Less than Satisfactory Performance of the National Forestry Plan, 2002



Unsatisfactory Forest Law Enforcement and Governance (FLEG) and institutional failures emerged as the major challenges to the performance of the forestry sector (contributing 54 and 32 percent respectively). Inadequacies in FLEG included flouting of policies, laws, and plans, inadequate stakeholder participation in implementation of the NFP, and little attention given to natural forest management.

Performance by Programmes

Programme 1 – Enabling Institutions

Under this programme, MWE is charged with coordinating, guiding and monitoring forest sector development. Formal sector coordination has been largely through the Environment and Natural Resource Working Group, which was later enlarged into the Water and Environment Sector Working Group. This arrangement has not been beneficial to forestry as a sub-sector. The coordination mechanisms which were established under the Uganda Forestry Policy and NFTPA (the Forest Sector Coordination Structure, the Consultative Forum, and the Forest Management Committees), were not operationalized.

In terms of providing guidance to the sector, some guidelines and standards have been prepared, but a number of them have not been fully implemented. The Forest Regulations have been drafted but they have not been gazetted, and hence there are still difficulties in implementing the NFTPA. In addition, the DFS Handbook was drafted but it has also not yet been adopted as an official guide for the operations of the DFS.

As the technical arm of the Ministry, FSSD is responsible for the supervision and monitoring of the forest sector. However, because of being under-resourced, this has not been effectively done.

The role of the Ministry of Energy and Mineral Development (MEMD) was to develop and implement strategies for biomass energy conservation. To this end, the MEMD has promoted energy saving cook stoves and developed a strategy for sustainable charcoal production. However, the impact of these interventions on households, charcoal producers and industrial

consumers is not yet evident. However, additional interventions of the MEMD in terms of alternative energy sources include (MEMD, 2007):

- Implementation of the Rural Electrification Project to some district headquarters, institutions, agro-processing industries and fish landing sites
- Promotion of biogas technologies, but this technology is curtailed by the high upfront costs, design-related challenges, operation and maintenance issues, and limited public awareness
- Promotion of solar energy for lighting and heating

Overall, only about 1 % of Ugandans use these forms of energy, and the majority (over 98%) still rely on biomass energy.

Since 2002, the participation of the CSOs in forestry sector development has been increasing. Their main areas of participation include:

- Engagement with government on policy and strategic plan dialogues;
- Undertaking advocacy roles for public concerns in forest conservation;
- Promoting participation of stakeholders; and
- Delivering services to the communities.

The CSOs have had significant contribution in forestry development at LG and community levels, and supported activities such as: agro-forestry; training of local communities in various aspects of forestry and tree management; development and support of FBEs; building organizational capacity of CBOs; development of bylaws; and public awareness and information dissemination. In most districts, the CSOs almost single-handedly supported LGs to implement the activities under this programme. Unfortunately, the coverage of CSOs is still limited geographically. Therefore, their impact is localized. At the national level, there is limited visible improvement in terms of agro-forestry, and the private natural forests continue to decline.

Programme 2 – National Agencies

This programme was essentially aimed at effectively managing the PFE through partnership arrangements between the NFA, LGs and local communities. To this end, the following work has been done:

- Some efforts have been made to develop collaboration between NFA and LGs, e.g. through memoranda of understanding (MoUs)
- Partnerships with local communities are being implemented through CFM, although coverage is still limited
- NFA has signed MoUs with NGOs, research and training institutions
- NFA has also had formal working arrangements with the Police and other law enforcement agencies

Because these efforts are still in their infancy, the impact of partnerships is not yet visible

Now that the first NFP after transformation of the forestry sub-sector has been implemented, new challenges regarding the capacity of government institutions (NFA, FSSD, & LGs) to administer and manage Uganda's forests have emerged:

- The government funding from the Consolidated Fund has not been disbursed as had been hoped,

- NFA has not managed to become self-financing as had been planned,
- The District Forestry Departments (DFDs) have not been operationalised to a level where they would deliver as had been hoped
- The PFOs have not embraced their responsibilities of managing their forests and have continued to convert them into agricultural lands
- None of the private or communal forests have been registered and so, there is no PFO who is a Responsible Body under the law.

Programme 3 – District Forestry Services

Under this programme, forestry activities outside CFRs were decentralized to LGs. Forestry advisory services were designed to be delivered under NAADS in a demand-driven arrangement. District forestry grants were expected to be established to encourage tree growing in environmentally sensitive areas. The ultimate result was expected to be improved agro-forestry and management of private natural forests and watersheds.

In practice, environment and natural resources have been decentralised without the corresponding resources from the Centre. As a result, forestry is low on the list of LG priorities in terms of budget allocation. However, recently, Government has mobilized resources through FIEFOC, and as a result, implementation of some activities such as watershed management planning, tree planting and management of private natural forests, has started.
The demand-driven advisory services under NAADS have not yet been beneficial to forestry development. Forestry enterprises are rarely chosen, although the aspect of fruit tree growing is picking up in some districts.

The District Forestry Grants have not been established. Government established a Vote in the Water and Environment Sector for transfer of funds to enable LGs to implement natural resources activities, but this has never been operationalized for forestry. Therefore, forests (especially natural forests) continue to deteriorate.

Programme 4 – Private sector development

The main focus of this Programme was the development of commercial forestry businesses by the private sector. Among all the Programmes, this has been the most successful, as corroborated by the stakeholders interviewed. The long period of awareness building that started during the forestry reform process has started bearing fruit. The lead role taken by the then Forestry Department and later, the NFA in establishing and maintaining demonstration timber plantations is beginning to yield dividends.

During the period 2004/05 – 2006/07, 21,000 ha of new quality timber plantations worth US$ 37.5 million, were established by NFA and the private sector. Investment in tree growing is a long term business (over 20 years for industrial plantations) and therefore it requires incentives. An initial step has been taken through the SPGS initially funded by the European Union and now, also the Norwegian Government. The scheme aims at promoting private investment in timber production in Uganda. It started in 2003 and in three years, it promoted the establishment of some 15,000 hectares of industrial timber plantations throughout the country.

The SPGS provides financial and technical support to investors in plantation establishment. The financial assistance comes in the form of a direct subsidy (or grant) paid in the first three years after planting. The total grant is currently UGX 1,800,000 per hectare, paid in instalments over a period of three years. The money is only paid where planters meet the standards as laid out in the contracts that have to be agreed first.

The other complementary incentive is availing FR land to the private sector investors under license. Over the last 10 years, the forestry sector has seen a surge in private investment in growing of industrial forest plantations. To-date nearly 149,000 ha has been licensed to private tree growers in CFRs. However, encroachment continued to be the main obstacle to private investment in forest plantations.

As a result of implementing this programme:

- At least 21,000 hectares of quality commercial forest plantations have been established
- A vibrant private sector organisation (Uganda Timber Growers Association) has been established to champion the interests of commercial private tree growers
- Skills in plantation establishment and management are increasing in the country
- A vibrant sector to service the establishment and maintenance of commercial plantations is growing, including specialized contractors in nursery production, plantation establishment and maintenance,
- Foreign direct investment in forest plantations is increasing
- Investments through domestic sources of funding (e.g. private savings, corporate social responsibility, etc) are increasing **(Figure 6 above**)
- Management of forest plantation for carbon sequestration and FSC certification is slowly taking root

In spite of these achievements however, the rate of planting is still far lower than the loss of forest cover in the country, and this is likely to continue in the foreseeable future.

On the other hand, the high cost of investment and long rotation period discourages many small-scale investors in venturing into the sector. Government has also invested very little in improving the necessary infrastructure like roads in the prospective forest plantation growing areas. Investment risks, such as fires and diseases, have not been addressed and incentives are insufficient to attract investment especially among the local population. Encroachment in CFRs is also a big hindrance to private forest plantation developers in the country.

In terms of harvesting and processing of forest products, little progress has been made. The sector is still characterized by antiquated technologies and practices like pitsawying, charcoal production using earth kilns, inappropriate sawmilling technologies, and use of rudimentary technologies in tree nursery production, among others.

Programme 5 – Urban forestry

This programme was aimed at greening of the urban environments. In practice, the development of urban forestry performed very poorly in most districts, as urban greens have been converted into concrete structures with little regard for maintaining a green environment. The pressure to convert urban forest reserves into buildings is increasing. There is very little or any efforts towards urban tree growing. However, there is booming business in roadside nurseries to supply ornamental trees to wealthy property developers and tree planters in peri-urban and rural areas.

Programme 6 – Forestry research

This programme was aimed at responding to the priorities of forest producers and users through provision of information and technology development. Forestry research has developed a home and modest infrastructure with wide linkages to expertise across the National Agricultural Research System (NARS) in Uganda, the regional and sub-regional organisations.

While strategic planning for research has been done in consultation with stakeholders, actual implementation has tended to respond to the priorities of the funding agencies. For example, agro-forestry research has been conducted, but the technologies have not been widely adopted by the local farmers, indicating that the research was not farmer-led. On the other hand, there has been little research work done in natural forest management and plantation aspects, where there are no funding agencies supporting these thematic areas.

Recently, commercial tree growers led by the Uganda Timber Growers Association (UTGA), with support from SPGS, have mobilized a number of research institutions into a collaborating arrangement under the Commercial Forestry Research and Training Group (COMFORT). Priority research needs are identified by the Association and implemented through COMFORT.

In terms of information dissemination, the Zonal Agricultural Research and Development Centres (ARDCs) have not been effective in providing information, training and demonstration services, for forestry development. Further, the link between farmers, management institutions like NFA and NaFORRI is weak, thus curtailing interactions between researchers and users of the research findings.

Programme 7 – Forestry education

This Programme was intended to strengthen forestry education and professional development in the sector. Makerere University Faculty of Forestry and Nature Conservation and Nyabyeya Forestry College have continued to provide training in forestry. The curricula in both institutions have expanded to accommodate new courses to match with emerging needs. The cross-cutting issues of gender and HIV/AIDS have been integrated in the training processes. However, there is still a gap in development of adequate practical skills during the training.

Informal education and training has also been offered, largely through CSOs. This is the main avenue for training local communities and imparting practical skills. However, there is a serious gap in knowledge and skills among local communities and private forest owners, which the current levels of informal training cannot bridge expeditiously enough.

4.3 Performance under other International Instruments

Forestry in the MDGs

In Uganda, forestry is a cross-cutting contributor in achieving the MDGs. Most Ugandans depend on forest and tree products for energy, building materials, medicine, wild foods, supply of clean water, and maintenance of soil fertility. FBEs, are gaining prominence in raising the cash incomes of the poor, and hence contributing to the **eradication of extreme poverty and hunger (MDG 1)**

Forests are a source of products and services consumed by the education sector, and therefore forests contribute to the achievement of **Universal Primary Education (MDG 2)**. Primary school enrolment more than doubled from 3.1 million pupils in 1996 to 7.5 million in 2008 (UBOS, 2009). This necessarily required a corresponding expansion of infrastructure like classrooms, teachers' houses, etc. This expansion requires timber and furniture. On the other hand, the schools largely depend on fuelwood for cooking food for pupils. Universal Primary Education has now encompassed the Universal Secondary Education, with a corresponding expansion of school infrastructure, and thus further demand on forest products.

Forests are a rich resource for medicinal plants on which many Ugandans depend for **maternal health care, HIV/AIDS** palliatives, **malaria control, treatment of children's diseases** and other human ailments **(MDG 4, 5 & 6).** Data about the population segment that uses herbal medicine in Uganda is hard to find but World Health Organisation (2003) estimates that in Ghana, Mali, Nigeria and Zambia, the first line of treatment for 60% of children with high fever resulting from malaria is the use of herbal medicines at home. The situation is most likely the same in Uganda.

Sustainable management of forest ecosystems contribute to **environmental sustainability (MDG 7).** In Uganda, forests play a key role in protecting water catchments, ensuring sustainable supply of quality water for domestic consumption, industrial use and generation of energy. Access to safe drinking water from boreholes, protected wells & springs, and gravity flow schemes stood at nearly 60% of the rural population in 2008 (MWE, 2009). All these water sources are dependent on watersheds that are protected mostly by forests and woodlands.

Unfortunately, SFM is elusive in Uganda today. This is clearly seen in the reducing forest cover in the country, a reduction of 27% between 1990 and 2005 (NFA, 2009).

Because of its crosscutting nature, forestry provides a platform for **global partnerships (MDG 8)** in the areas of biodiversity conservation, climate change, conservation of water resources, sustainable land management and improvement of governance. Uganda subscribes to the Paris Declaration on Aid Effectiveness (2005) in which Governments; multi-lateral and bilateral development institutions committed themselves to, among others:

- Strengthen partner countries' national development strategies and associated operational frameworks (e.g. planning, budget, and performance assessment frameworks).
- Increase alignment of aid with partner countries' priorities, systems and procedures and help to strengthen their capacities.
- Enhance donors' and partner countries' respective accountability to their citizens and Parliaments for their development policies, strategies and performance.
- Eliminate duplication of efforts and rationalise donor activities to make them as cost-effective as possible.
- Reform and simplify donor policies and procedures to encourage collaborative behaviour and progressive alignment with partner countries' priorities, systems and procedures.
- Define measures and standards of performance and accountability of partner country systems in public financial management, procurement, fiduciary safeguards and environmental assessments, in line with broadly accepted good practices and their quick and widespread application.

Climate Change Instruments

Uganda ratified the Kyoto Protocol on 25th March 2002. The Focal Office is located in the Climate Change Unit (CCU) at the MWE. The CCU is the Secretariat of the National Climate Change Steering Committee, composed of representatives of private sector, public institutions and civil society organisations.

The first Clean Development Mechanism (CDM) Reforestation Project is the Uganda Nile Basin Reforestation Project located in Rwoho CFR that spreads into Isingiro, Mbarara and Ntungamo Districts. The project is implemented by the NFA, in close partnership with local communities, and the BioCarbon Fund of the World Bank is buying the emissions reductions (ERs) from the NFA. The local community groups have been contracted by the NFA to plant up to 20% of the project area. However, NFA is responsible for the delivery of all ERs under the contract. The beneficiaries will get a share of the money received from the sale of the emission reductions in accordance with the areas planted.

In Uganda, the country has embarked on the first steps towards preparation of its REDD+ Strategy. The Forest Carbon Partnership Facility of the World Bank is currently assisting the country to prepare its Readiness Preparation Proposal (R-PP). NFA, as the national focal point institution for REDD+, is spearheading this REDD readiness preparation process. To this end, a REDD Working Group has already been put in place and a draft R-PP is has been informally presented to the World Bank. If the R-PP is accepted by the World Bank, then Uganda will access funding that will facilitate the process of preparing the actual REDD+ Strategy over the next 2 years.

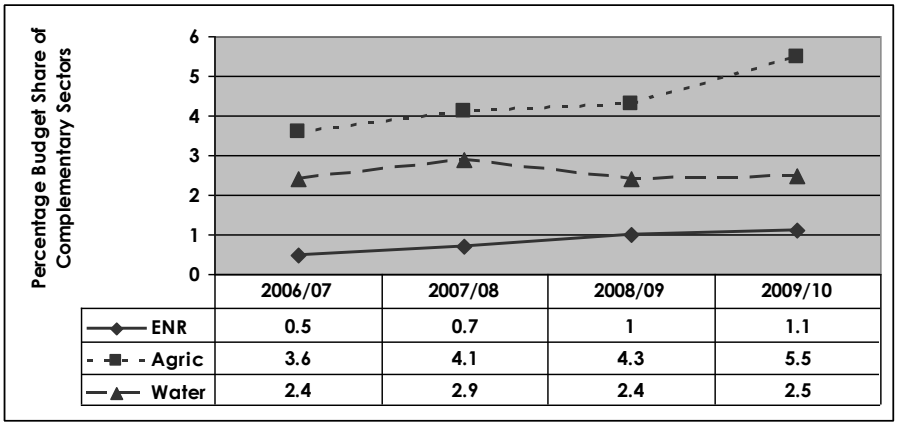
4.4 Funding Implementation of the NFP

Domestic Public Sector Funding

The Poverty Eradication Action Plan (PEAP) was the main public investment vehicle during the currency of the NFP, 2002. Linked into the PEAP is the Medium Term Expenditure Framework (MTEF) which is a strategic budgeting framework that is reviewed and extended during the annual budgeting cycles.

The PEAP (2004/05 – 2007/08) was strong on statements about the need to reduce deforestation, funding management of district and community forests, reducing soil and forest degradation, meeting domestic energy needs and increasing service delivery in the field of forestry among others. However, these strong statements were not accompanied by commensurate resources in the MTEF to implement them. **Figure 10 c**ompares the budget allocations for sectors that can be considered complementary because they depend on the activities of each other to deliver services to society.

Figure 10: Budget Allocations to the ENR Sector



	2006/07	2007/08	2008/09	2009/10
ENR	0.5	0.7	1	1.1
Agric	3.6	4.1	4.3	5.5
Water	2.4	2.9	2.4	2.5

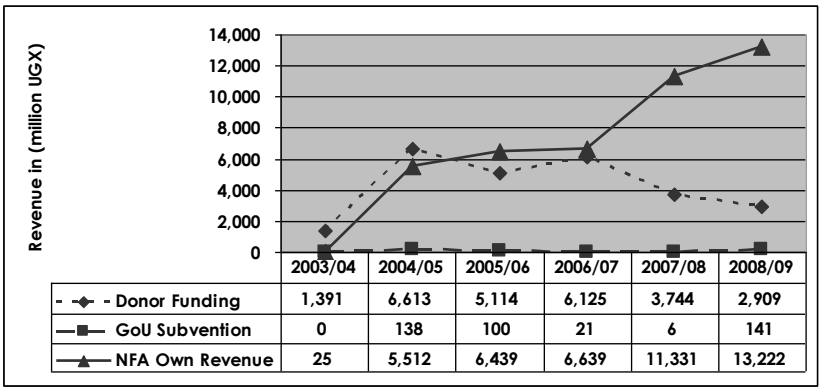
Source: MoFPED, (2009)

Clearly, forestry is a very low underdog, both at central and LG levels. LG budgets largely mirror the finances being transferred from the Central Government. While the mobilization of funds for the sector is the responsibility of MWE, the Ministry has not prioritized forestry for resource allocation. The Ministry has also barely pursued the Ministry of Finance, Planning and Economic Development (MFPED) to establish conditional grants to LGs for forestry developments.

Management of CFRs is a responsibility of the NFA, a semi-autonomous statutory body which has its own planning and budgeting process. Its main strategic planning document is the 5-year business plan. At the establishment of NFA, it was agreed by the main funding agencies (government and Development Partners) that the bulk of its budget would be funded through official development assistance (ODA) for the first 4 years. After this, it was expected that the

NFA would be able to meet its routine operating expenses from its own revenue. **Figure 111** shows that NFA's own revenues have been increasing while ODA has been decreasing.

Figure 11: NFA Revenues for the Period 2003/04 (3 months) to 2008/09



	2003/04	2004/05	2005/06	2006/07	2007/08	2008/09
- Donor Funding	1,391	6,613	5,114	6,125	3,744	2,909
GoU Subvention	0	138	100	21	6	141
NFA Own Revenue	25	5,512	6,439	6,639	11,331	13,222

Source: NFA Reports

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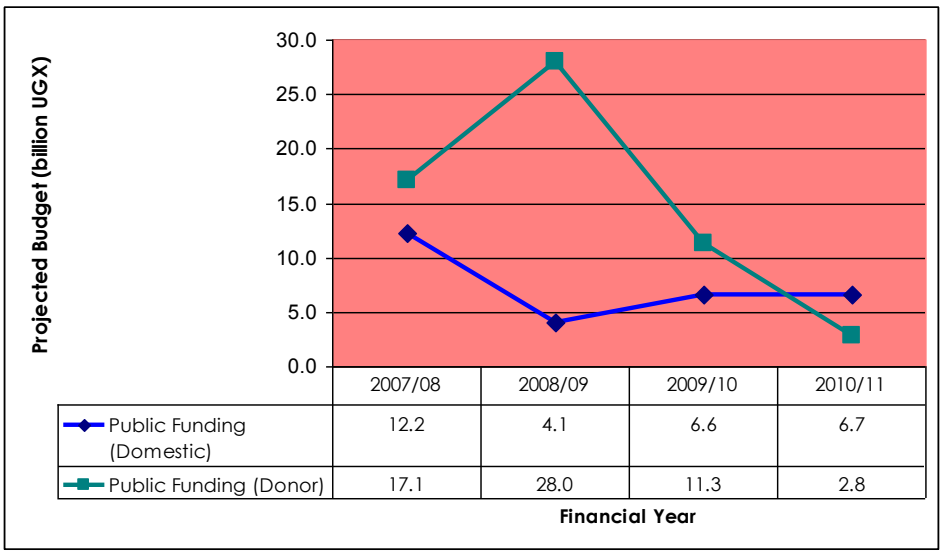
This looks like a healthy development until one realises that timber plantations, which provided 72% of the total revenues collected in 2008/09 are now virtually exhausted. This has raised questions about the initial assumption that NFA would be financially self-sustaining after the first 4 years of its operation. In addition, Government of Uganda (GoU) subvention to NFA was expected to be UGX 1.45 billion for the first four years. However, the actual allocation in the years indicates failure of Government to meet its obligation in providing initial funding for NFA, and hence increasing the dependence of NFA on internally generated revenues.

In general terms, public sector funding for the Environment Sector has been on the downward trend **(Figure 122).**

Figure 12: Public Sector Funding for the Period 2007/08 – 2010/11



	2007/08	2008/09	2009/10	2010/11
Public Funding (Domestic)	12.2	4.1	6.6	6.7
Public Funding (Donor)	17.1	28.0	11.3	2.8

Source: MoFPED (2009)

The forestry sector has particularly depended more on funding coming from ODA sources in form of programmes and projects, as shown in **Table 8.**

Table 8: Programmes funded under ODA

List of Program/project	Implementing Agency	Total Cost	Location	Donor	Remarks

List of Program/project	Implementing Agency	Total Cost	Location	Donor	Remarks
Forest Resources Management and Conservation Programme	FD/NFA	€12 million	mainly CFRs	EU	Ended in Dec 08
Sawlog Production Grant Scheme	MWE	€10 million + US$10 million	whole country	EU & NORAD	Renewed in 2009
Sustained development of the Uganda National Forestry Authority with enhanced focus on Northern Uganda	NFA		Kampala	NORAD	On-going
Farm Income Enhancement and Forest Conservation Project	MWE		33 districts (100 subcounties)	ADB	On-going
Preparation of NFM & community forests Guidelines	FSSD		Kampala	FAO	Ended 2007
National Forestry Programme	UFWG			FAO	On-going
	WCS		Albertine Rift, Northern Uganda		On-going
Wildlife, Landscapes and Development for Conservation (WILD)	WCS		Northern Uganda	USAID	Ends June 2011
Prime West			Western Uganda	USAID	Ended???
MS Uganda	NFC		NFC		Ended???
	Nature Uganda		Echuya, K-Kitomi		On-going??
Participatory Env. Mgt project	Nature Uganda/WWF		Kasyoha Kitomi	DANIDA	On-going
MERCEP	NFA		Mt. Elgon watershed	Norway	On-going
Albertine Rift Forest Conservation Project	MWE/WWF		Northern Section of Albertine Rift	GEF	On-going
L. Albert Catchment Conservation Project	WWF		Lake Albert Catchment Area		Ended 2009
Mt. Rwenzori conservation Project	WWF				on-going??
SFM and Forest Certification, Climate change and Energy	WWF	$ 199,000	Kampala	DANIDA	Design phase
(2 projects)	JGI			GEF	Ended???
	CARE				On-going
EMPAFORM	CARE	€2.8 million	East Africa	EU	Ended 2009
REDD Preparation Proposal	NFA		whole country	World Bank & Norway	
Carbon Pilot Project	NFA		Rwoho CFRs	World Bank	on-going
Carbon Pilot Project	NFA		Kasagala & Mt. Rwenzoori CFRs	World Bank	on-going
Review of NFP	MWE	USD 41,000	whole country	FAO	On-going
LVEMP	MWE		Lake Victoria Catchment	World Bank??	On-going

List of Program/project	Implementing Agency	Total Cost	Location	Donor	Remarks
			Area		
				BTC	
				Irish Aid	
Funding various research programmes and activities	Research institutions and Universities				
	Various CSOs				

Private Sector funding

In terms of private sector investment in forestry, tree growing is the favourite destination for domestic private sector funds. This observation is corroborated by a survey of forestry stakeholders conducted in Uganda (Global Mechanism, 2009), in which it was established that 90% of the forest stakeholders invested in tree growing and management and the associated raising of seedlings **(Table 9).**

Table 9: Forest Management Activities Invested In

Fund Destination	% of Responses
Tree growing and management	71
Seedling raising	19
Bee keeping	4
Natural forest management	5
Ecotourism	1
Medicinal plants production	1
Others	1
Total Responses	**100**

Source: Global Mechanism (2009)

Only 4.9% of the stakeholders indicated that they had invested in natural forest management. Ecotourism and medicinal plants, which are closely associated with natural forest management, had the least response of 1%. In fact, some of the respondents indicated that investment in natural forest management was "not applicable". All these observations show that there is a general lack of interest by the private sector to invest in natural forest management and conservation, which is often considered to be of "public good" nature.

On the other hand, private sector investment in industrial forest plantations has been on the increase since 2004. Analysis of the area of timber plantations established in CFRs under license by 2008 showed that small and medium scale investors (growing up to 500 ha) contributed 69% of the total area planted, while foreign direct investment (injected through three Companies) contributed to establishing about 6,400 ha, or 29% of the total area planted (Global Mechanism (2009). **Table 10** shows the detailed analysis.

Table 10: Classification of Tree Growers in Uganda

Class range (Ha)	No. of people who planted	Total Area planted (ha)	% of area planted
Less than 6	1,988	4,812	22
6-10	172	1,398	6

Class range (Ha)	No. of people who planted	Total Area planted (ha)	% of area planted
11-20	76	1,251	6
21-40	43	1,279	6
41-60	20	966	4
61-80	9	645	3
81-100	7	638	3
101-500	23	4,115	19
Sub-total	**2,338**	**15,104**	**69**
501-1000	1	514	2
1001+	3	6,397	29
Grand Total	**2,342**	**22,015**	**100**

Source: Global Mechanism (2009)

According to the Global Mechanism study, the factors that tend to motivate private sector investment in forestry include:

(i) ***Profit and the relatively low risk*** which the respondents associated with tree growing as a business. Ultimately, profit leads to national economic growth and a secure income for the PFOs (most of them are small to medium scale growers), reduced levels of poverty, and improved livelihoods.

(ii) Availability of Grant Funds to augment initial capital triggers investment of private sector funds to highly significant levels. This has a catalytic effect on further investment after the grant has served its purpose. This has been demonstrated by the SPGS which has mobilised the private sector to invest

(iii) ***Supply of fuelwood*** has become more important as the small to medium scale processing and service industries increase. The industries include bakeries, beer brewing & distillation of local gin, hotels & restaurants, preparation of school meals, etc. The hotels and restaurants industries grew at an average rate of 9.6% (constant 2002 market prices) between 2004 and 2008) (MoFPED, 2009), which is indicative of increase in industrial fuelwood consumption.

(iv) ***Availability of Land,*** whether private or institutional (under license) is also a motivator for tree growing. However, while CFR land may be a good motivator for growing trees today, it appears that this motive may not remain strong, as people begin to invest in tree growing on their own land. This has something to do with the growing uncertainty of keeping licensed land in CFRs long enough to guarantee investment.

Perhaps not too surprisingly, **protection of the environment,** which has often been promoted to encourage tree growing and forest management, showed the least significance in the relationships between the area planted and the incentives. People simply do not invest in tree growing because the environment is at stake. That is the preserve for public investment.

5.0 SYNTHESIS OF STRENGTHS, WEAKNESSES, OPPORTUNITIES AND THREATS

The strengths, weaknesses, opportunities and threats were generated through stakeholders at national level.

5.1 Strengths

(i) Supportive policy and legislation

- The forest policy and law are robust and provide a good basis for institutional frameworks for responsible forest management.
- The law gives NFA a semi-autonomous status, which allows it to operate with adequate freedom for decision-making, flexibility in resource mobilization and to function in a business-like manner, without facing the bureaucratic challenges associated with line government departments.
- The various forestry-related laws prescribe procedures for transparency in decision-making and resource management.

(ii) Good systems for implementation of responsible forest management

- NFA has developed sound guidelines and practices for sustainable forest management
- Modern technologies are being used in some forest management operations. For example, Geographical Information Systems (GIS) is used in forestry inventories (biomass, timber and biodiversity) to produce information needed for policy development and forest management

(iii) Increased access to forestry information and awareness

- A lot of information to aid decision-making in forestry is available, albeit being dispersed among many institutions
- The public is increasingly becoming aware of the importance of forestry for their well-being. This has been demonstrated by:

  a) tree growing picking up;
  b) increased public pressure on Government to manage forests and trees responsibly
  c) increased involvement of private companies in tree/forest-related corporate social responsibility investments
  d) increased investment in FBEs by local communities

(iv) Increased stakeholder participation

- Community participation has been fostered mainly through CFM. In addition, there have also been other arrangements of collaborating with communities. Participation clarifies the benefits to the local people and thus creates a strong sense of ownership of the resource, and motivates them to effectively participate in protection of the forest
- CSOs are increasingly being seen by government institutions as serious partners in the development of the sub-sector.

(v) Available formal training in forestry

- Forestry training institutions have produced many trained foresters who can be easily equipped with the necessary skills to manage forestry programmes

(vi) Increasing private sector involvement in forestry related investments

- The private sector and communities are increasingly getting involved in commercial forestry plantation development and tree growing
- Availability of land in CFRs for private sector investment (e.g. forest plantation establishment, eco-tourism) has encouraged tree planting among people with little private land.

5.2 Weaknesses

(i) Corruption

- Corruption is manifested through embezzling of money or forest products by the custodians of the forest resources, fuelled by greed, bribery and influence peddling. Officials in positions of power go against acceptable professional practices and break the law, often with impunity.
- In terms of revenue collection, flouting of procedures has resulted in sale of forest produce at prices that are far less than the market values, and hence caused revenue losses.
- Unscrupulous business operators, politicians and technocrats use their positions of influence to discredit the comparative benefits of responsible forest management so that they can influence the transfer of government forest lands to other land uses.
- Business people use their connections with high level politicians to appropriate for themselves forest resources at give-away prices.

(ii) Inadequacies in implementation of policy, legislation and plans

- Levels of compliance with forest-related policies and laws are variable. There are many cases in which the policies and laws are flouted not only by the law breakers, but also those charged with implementing the policies and enforcing the laws.
- On the regional scene, there are no legal mechanisms to regulate trans-boundary forest management, thus affecting the conservation of cross border forests and inadequacies in regional trade in forest products.
- Private forest owners have not performed well in protecting and managing their forests as Responsible Bodies because they do not have adequate legal provisions to back them up.
- Failure to approve the forestry regulations and management plans (FMPs) has continued to foster *ad hoc* management of forest resources
- The legal framework is silent about forest management authorities being accountable to the people who are affected by their decisions. Legal provisions are not forceful enough to enable the public to easily demand and get accountability from government institutions responsible for management of forestry resources.

(iii) Limited forestry research

- Little research is being carried out with respect to technical forest management. Most of the research that has been done has concentrated on the social and agroforestry aspects leaving out the technical aspects of natural forests and forest plantations.
- Even in cases where research has been carried out, packaging and dissemination of research findings still leaves much to be desired.

(iv) Inadequate Forestry Skills Training

- Generally, there are low levels of practical skills among the staff of forestry related institutions. Most of the staff are not able to handle some of the more technical forestry operations like inventories, harvesting, stock surveys, etc. effectively
- Private forest owners have even much lower levels of skills in managing their forests

(v) Inadequate incentives to support sustainable forest management

- There are limited incentives for investment in tree growing and virtually none for sustainable management of natural forests, especially those on private land

(vi) Inadequate financing for forest resource management

- Domestic public funding for forestry is limited mostly to salaries and wages, with very little left over to meet operational expenses of the forest management institutions like FSSD and DFDs
- The financial sustainability of NFA after four years of operation was over-optimistic. Since the timber plantations are now exhausted, it will be impossible for NFA to cater for all the recurrent and investment needs of managing the CFRs
- Revenue from natural forests is not sufficient to fund sustainable management of these forests at present. The situation is even graver for forests on private lands.

(vii) Technical constraints

- Forest products prices are based on what the market offers instead of the true value of the forest products and services. It is still not yet feasible to include ecosystem values into the forest product prices.
- Illegal timber on the market tends to depress the prices of legally sourced timber.
- Increasing population imposes pressure on resources use. As population increases, there is expansion of agriculture, and consumption of forest products like timber, charcoal, & firewood increases, which in turn increases pressure on forest resources.
- Uganda's GDP grew at an average of 7.5% between 2002 and 2008 (UBOS, 2009). This meant that the demand for forest products (e.g. for construction, energy for small & medium-scale processing industries, and farmland) increased, thus escalating pressure on forest resources and lands.
- The demand for forestry products & services far exceeds the carrying capacity of many forests, leading to over-exploitation of the forests
- In terms of external trade, Uganda is a net importer of forestry products, and the gap between the imports and exports has been widening (UBOS, 2008)
- The management of forests is generally characterized by antiquated technologies in forest production, harvesting and processing. Consequently, very low recovery rates (often less than 20%) are experienced in the timber processing industry. Production of tree seed and planting materials is still done through rudimentary technologies.
- Many forest reserve boundaries are being contested by local communities
- Over-reliance of communities on woodfuel is exerting pressure on forestry resources. In terms of fuelwood, 73 % of all the districts in Uganda were already experiencing a deficit of accessible woody biomass for fuelwood even by 2002 when the NFP was prepared (Forestry Department, 2003). This can only have gotten worse given that population has increased. Today there is limited emphasis on the production of fuelwood for the country's energy requirements, especially in the rural areas
- Oil exploitation can have far-reaching negative impacts on the forest resources by increasing rates of deforestation, increasing demand for biomass energy, and aggravating pollution and forest fires. Oil exploration and exploitation, will attract more people in the areas of exploitation and this will result in problems for forest resource security
- There is limited capacity of the private sector to deliver internationally acceptable and competitive carbon credits.

(viii) Poor coordination, supervision and monitoring

- The preferential treatment of NFA favoured the management of the CFRs and NPs & WRs leaving other forests to suffer. Consequently, pressure is now being turned onto FRs, and this will be very difficult to contain as more forests on private lands continue to disappear.

- Low priority is being given to the management of private natural forests in terms of resource mobilisation, inventories, and research, among others.
- Most of the forestland is being converted to other land uses. In PAs, this is being done through encroachment while PFOs simply convert their land to agriculture, livestock production and other uses which they deem more income generating.
- The actual decisions related to forestry management frequently do not follow the laid down procedures. For example, harvesting is sometimes done without following the guidelines laid down in the FMPs and other technical manuals
- Weak sector coordination
- Weak sector supervision and technical guidance
- Illegal logging in CFRs and uncontrolled harvesting on private lands

(ix) Weak partnerships with local communities

- Management of forests has tended to concentrate on forests themselves, leaving the people who should benefit from these forests at the periphery. This is why there is continued cutting down of the forests without due regard for sustainability.
- Observations indicate that in spite of the long gestation period of CFM in Uganda (since 1997), it has not yet been widely adopted as the obvious forest management practice.
- Planning and implementation of CFM is hampered by covert interests of some stakeholders, especially those in leadership positions.
- The benefits that communities receive under CFM arrangements are not enough to create incentives for improved management of CFRs.
- Some of the management information is highly technical and cannot be easily understood by local people. In addition, most stakeholders cannot readily access some of the information available at the relevant institutions.

5.3 Opportunities

(i) Support of some politicians at various levels

- There is positive support from some politicians and decision makers at various levels, especially in terms of providing policy direction for forestry development. Political support is very instrumental to the success of public institutions, as was the experience of NFA during its first four years, and the subsequent slow-down of performance when political support waned.

(ii) Financing forest management

- Forestry has been categorised as a primary growth sector in the NDP, which provides an opportunity for forestry institutions to mobilize financial resources for forestry development
- A number of products and services from forests are now becoming more marketable and therefore, a promising source of income for the forest owners and revenue for government forest management institutions.
- Forest biodiversity is becoming a niche for Uganda within the East African Community, and landscape tourism is a real possibility in the rugged terrain in Northern Uganda (NFA, 2008).
- There is increasing financing for corporate social responsibility programmes related to forestry
- Large amounts of money are deposited in social security schemes (pension funds) every year. These funds could be accessed for investment in forestry
- The law provides for a Tree Fund and an Environment Fund, which can be operationalised for forestry development
- There is goodwill among development partners to finance forestry in the country
- International initiatives on climate change are providing further opportunities for funding forestry programmes. These include REDD+ and reforestation and afforestation under CDM;

- Increased revenue from forests by attracting higher incomes through forest certification initiatives.
- The oil revenues from the Albertine Rift Grabben will provide an excellent opportunity to increase public investment into SFM.

5.4 Threats

(I) Political interference

- During elections of political leaders, the rule of law meets its greatest challenges. Political leaders are unwilling to antagonise voters and therefore the leaders often compromise their otherwise laudable stand on issues of responsible forest management. Knowing this, the forest managers and law enforcement agencies normally withdraw from effective law enforcement until long after the elections are over. By this time the damage done to the forests is, in most cases, irreversible.
- Forest stewardship and governance are often coloured by the pressure of the vote, especially during presidential and parliamentary elections. The voters have come to understand the power they have over those seeking to be elected. Unfortunately, the realisation of this power has led to the piling up of pressure on incumbent political leaders to de-gazette PAs and thus side with the people in breaking the law.
- The drive by individuals in central and local governments to de-gazette FRs is undermining the sanctity of the PAs.
- Unprecedented political interference has, in most cases, aided intense hostility and social stress between the institutions managing forests and the local communities.

Part 2:

THE REVISED NATIONAL FORESTRY PLAN, 2010

6.0 MAIN CONSIDERATIONS SHAPING THE NATIONAL FOREST PLAN

6.1 Period of the Plan

The NDP divides the period in which to achieve Uganda's Vision (30 years) into three 10-year NDPs. Each 10-year NDP is further divided into two five-year NDPs. In view of the nature of much of the investment ventures in forestry, this NFP will cover a period of 10 years (2011/12 – 2020/21), in order to stay in sync with the NDP planning cycles. However, the NFP will be reviewed to take into account emerging issues every five years, in line with the 5-year NDP periods.

6.2 Beneficiaries

The target beneficiaries of this NFP are now categorised as follows:

- **Small-scale rural producers and users** that include local communities, e.g. tree farmers, users and processors of non-wood forest and tree products, pastoralists, forest dwellers, brick and lime makers, fish dryers, commercial nursery operators and seed producers.
- **Small-scale urban producers and users** e.g. urban and peri-urban tree growers; charcoal and firewood users, nursery operators, and processors of wood and non-wood products
- **Larger-scale commercial producers and users that include** private timber producers, natural forest owners, and those who grow trees for commercial purposes (e.g. tobacco growers, tea and sugar estates, religious and traditional institutions, hydro-power processors, manufacturers of soft-drinks, construction companies and tourism industries)
- **The wood processors** have included charcoal makers, commercial fuelwood and charcoal traders, pitsawyers, sawmillers, timber traders, plywood manufacturers, carpenters, joiners and artisans.
- **Institutionalized producers and consumers** (e.g. NFA, UWA and local governments, research institutions, training institutions, and CSOs;)
- **The International community** including tourists, funding agencies, researchers, buyers of forest products, conservationists, and the global community, among others.

6.3 The Constitution of the Republic of Uganda

The Constitution of the Republic of Uganda, 1995, as revised in 2005, aims at sustainable national development that takes into account environmental conservation, social development and economic growth. It empowers Government, including LGs, to hold in trust for the people and protect forest reserves (FRs) and reserve any other land for ecological and touristic purposes for the common good of all of the citizens of Uganda.

The Constitution differentiates forests managed by the Central Government and those managed by Regional Governments (Republic of Uganda, 2005). The Central Forest Reserves (CFRs) and forests in NP&WRs are managed by Central Government Statutory Bodies, while the Local Forest Reserves (LFRs) and all forests outside the PAs are under the jurisdiction of LGs.

6.4 The Uganda Forestry Policy, 2001

The Uganda Forestry Policy (2001) will continue to provide political guidance to forestry developments. Therefore, the second NFP aims at contributing to the forest sector vision and goal enshrined in the Forestry Policy, and putting into action the policy statements contained therein. **Table 11** gives the policy statements as prescribed in the current Forestry Policy.

Table 11: Policy statements from the Uganda Forestry Policy (2001)

1. Forestry on government land	The Permanent Forest Estate under government trusteeship will be protected and managed sustainably
2. Forestry on private land	The development and sustainable management of natural forests on private land will be promoted
3. Commercial forest plantations	Profitable and productive forestry plantation businesses will be promoted
4. Forest products processing industries	A modern, competitive, efficient and well-regulated forest products processing industry will be promoted in the private sector
5. Collaborative forest management	Collaborative partnerships with rural communities will be developed for the sustainable management of forests
6. Farm forestry	Tree-growing on farms will be promoted in all farming systems, and innovative mechanisms for the delivery of forestry advisory services will be developed
7. The conservation of forest biodiversity	Uganda's forest biodiversity will be conserved and managed in support of local and national socio-economic development and international obligations
8. Watershed management	Watershed protection forests will be established, rehabilitated and conserved
9. Urban forestry	Urban forestry will be promoted
10. Education, training and research	The government will support sustainable forest sector development through appropriate education, training and research
11. Supply of tree seed and planting stock	Innovative mechanisms for the supply of high quality tree seed and improved planting stock will be developed

In addition, the policy prescribes the following measures to facilitate its implementation.

(i) Adopt a national forest programme approach
(ii) Develop a favourable investment climate for private and public investment in the sector
(iii) Establish appropriate sectoral co-ordination structures
(iv) Strengthen the institutional framework for the forest sector
(v) Develop a new legal framework for the forest sector
(vi) Specifically enable women, youth and poor people to benefit from development of the forest sector
(vii) Participate fully in the development and implementation of international obligations and cross-border co-operation agreements
(viii) Monitor and regularly assess Implementation of the Forestry Policy

6.5 Implementation of forestry related policies

The energy policy for Uganda (2002)

The main policy goal of the energy sector is "to meet the energy needs of Uganda's population for social and economic development in an environmentally sustainable manner" (Ministry of Energy and Mineral Development, 2002). Biomass (firewood, charcoal and crop residues) is recognized as important renewable source of energy, and providing almost all the energy used to meet basic needs of cooking and water heating in rural and most urban households, institutions and commercial buildings.

One of the objectives of the energy policy is to develop the use of renewable energy resources for both small and large-scale applications. This is to be achieved through supporting the

dissemination of biomass and other renewable energy technologies to increase positive impact on the energy balance and the environment, and supporting efforts to develop biomass resource in agreement with the Uganda Forestry Policy and the National Forest Plan.

Other sector policies

Policies of other sectors which affect or are affected by forestry include the Gender Policy (1997), National Environment Management Policy (1994), National Policy for the Conservation and Management of Wetland Resources (1995), The Wildlife Policy (1999) the National Water Policy (1999) and the National Agricultural Research Policy (2005).

6.6 Sector laws and regulations

The National Forestry and Tree Planting Act, 2003 (NFTPA),

The National Forestry and Tree Planting Act, 2003 is the main legislative framework for the forestry sub-sector. Key provisions of the Act include:

- A National Forest Plan as the main public framework for implementation of the forestry policy and programmes in the forestry sub-sector
- Management of all types of forests (forest reserves, community forests and private forests) in a sustainable manner
- Responsible Bodies (National Forestry Authority, UWA, Local Governments and Private Forest Owners) for the management and supervision of forests in Uganda
- CFRs and LFRs managed by the central and local governments respectively
- Involvement of local communities in planning and management of forest reserves
- Tree growing on farm
- Establishment of the NFA as a central government Statutory Body for management of CFRs; and a District Forestry Office as the technical arm of the District Councils in supervising management of LFRs, private forests and trees on farm
- Statutory regulations to implement the Act

The Land Act (CAP 227)

The Land Act vests ownership of land in the citizens of Uganda. However, it:

- Requires all landowners to manage and utilize their land in accordance with the Forests Act and other relevant laws.
- Empowers Government, including LGs, to hold in trust for the people, and protect forest reserves and other land for the common good of the citizens of Uganda.
- Prohibits Government from leasing out or alienating any natural resource mentioned in the Act (including forest reserves), without the approval of Parliament. However, Government may grant licenses, concessions or permits.
- Encourages LGs to request the central government for authority to manage any of the resources that are held by the Central Government.

The National Environment Act (CAP 53)

The Act creates the National Environment Management Authority (NEMA) with the overall responsibility of making sure that all parties involved carry out their activities in an environmentally friendly manner. It provides for establishment of LG Environment Committees to coordinate activities at various LG levels. The Act links into the NFTPA by providing for management of all forests in accordance with the principle of sustainable development. It establishes a relationship between NEMA and the lead agency in forestry.

Other Laws

Other laws that are important for SFM include:

- Uganda Wildlife Act (CAP 200)
- Local Governments Act (CAP 243)
- the National Agricultural Research Act (2005)
- The Traditional Rulers (Restitution of Assets and Properties) Statute (CAP 247)
- The Inspector General of government Act (CAP167)
- The Leadership Code (CAP 168)
- The Magistrates Act (CAP 16)
- The Police Act (CAP 303), and The Evidence Act (CAP 6)

Stakeholder Views

During a study undertaken by the World Bank, 2010, the reasons for the decline in forest resources were attributed by respondents mostly to poor forest governance. Some of the issues raised in the study and which are relevant to policy & law include:

- The forest policy & law contain very clear principles of sustainable forestry in Uganda. However, the commitment of government in implementing the provisions in these documents is less than desired
- In increasing cases, offenders are becoming very aggressive, resulting in confrontations which have sometimes resulted into death of the offender or the defender of the resource
- Mechanisms for transparency and accountability are well grounded in the laws and institutional procedures, but they are not always followed
- Mechanisms to enable people who are affected by the forest policy and related actions to influence them are inadequate. Those that exist are not widely respected
- All forest dependent communities have legal access (licenses, free issues) to the necessary forest resources, but their rights are not fully respected.

In the process of revising the National Forest Plan, 2002, interviews involving key stakeholders at national level showed that 65% of all the reasons for the poor performance of the NFP were connected with FLEG and institutional issues **(Table 12**).

Table 12: Reasons contributing to poor NFP performance (percentage)

Grouping of Issues	Percent
Forest law enforcement & governance	34.41
Institutional issues	30.11
Training	4.30
planning and monitoring issues	4.30
Reforestation and conservation	4.30
Community based natural resource management	3.23
Research and Information management	3.23
Awareness	3.23
Commercial plantation development	3.23
Land use issues	2.15
Forest products & services	2.15
Financing	2.15
policy issues	2.15
Population pressure	1.08
	100.00

Source: World Bank study (2010)

6.7 The National Development Plan

The NDP development strategy aims at directing Uganda's development towards a vision of ***"A transformed Ugandan society from a peasant to a modern and prosperous country within 30 years"***. The NDP looks forward to 2017 when the country will be dominated by a middle income society. To this end, the NDP elaborates 6 attributes of this vision. The ones of direct relevance to forestry are:

- The population is equipped "…with the **relevant knowledge, information and skills** to enable them improve their quality of life, respond to development challenges and compete nationally, regionally and internationally"
- Ugandans should be able to **exploit and use national resources gainfully and sustainably** …" in a way that supports stability and protection of biological and physical systems.

In line with these attributes, the NDP emphasises ***"…sustainable development through preservation of natural resources such as forests and wetlands …"*** Accordingly, the NDP places forestry at the centre of Uganda's development agenda by categorizing it as a primary growth sector, alongside other sectors like agriculture, tourism, industry, oil & gas. Key provisions on forestry are given in **Table 13.**

Table 13:NDP provisions on forestry

Forestry Sector Objective	Strategies
1. restore forest cover from 3,604,176ha as of 2005 to 4,933,746ha (1990 levels) by 2015	(i) Re-forestation and afforestation of 1,266,000ha in 698 forest reserves and 730,000ha in national parks and game reserves (ii) Promote greening along and around public infrastructure and establishments (iii) Promote commercial tree planting on private land (iv) Increase involvement of the population in tree planting (v) Support research and development to promote high yielding and appropriate tree varieties (vi) Strengthen the capacity of relevant sector institutions to effectively enforce forest and environmental laws and regulations
2. Restore degraded natural forests in forest reserves and private forests	(i) Improve low stocked natural forests using the landscape approach (ii) Protect the government permanent forest estate
3. Reduce pressure on forest cover as a source of woodfuel and construction materials	(i) Speed up implementation of the rural electrification programme (ii) Scale up incentives to promote investment in generation and use of alternative energy (iii) Promote the use of efficient energy saving stoves (iv) Invest in research and development for alternative energy sources (v) Promote efficient use of timber in the construction and furniture industries (vi) Regulate forestry activity on private land in line with the land use policy
4. Promote forestry based industries and trade	(i) Promote forest habitat-based livelihoods and products (e.g. apiculture and natural medicines) (ii) Promote ecotourism (iii) Introduce and popularise the use of timber and timber product substitutes and processing technologies (iv) Strengthen networks for participation of local private sector in the global carbon credit market

In addition to the above provisions, forestry is also provided for under other sectors in the NDP. These provisions are shown in **Table 14.**

Table 14: Integration of forestry in other sectors under the NDP

Sector	Strategy
1. Energy	(i) Promote and facilitate the use of renewable energy technologies at household and institutional levels (ii) Promote and facilitate the use of bio-fuels
2. Water	(i) Manage water resources at catchment areas (ii) Foster partnerships with relevant agencies to ensure proper use and protection of catchments to minimise degradation of water resources
3. Environment	(i) Restore forest cover to the 1990 levels (ii) Restore wetlands, rangelands, and monitor restoration of all ecosystems (iii) Support environmental improvement initiatives (iv) Develop national, regional & international partnerships & networks to enhance trans-boundary environmental management (v) Increase public awareness and environmental education (vi) Promote compliance with environmental laws and regulations (vii) Increase and enhance access to environmental information for investment and environmental management
4. Climate Change	(i) Address legal and institutional frameworks necessary for the implementation of the UNFCCC (ii) Re-define climate change as a development issue (iii) Provide and promote incentives for clean environment (iv) Implement climate change conventions
5. Urban Development	(i) Develop & implement urban beautification and landscape plans for selected urban areas (ii) Carry out urban greening

Stakeholders agree that since forestry has been categorised as a primary growth sector in the NDP, activities should aim at delivering according to the expectations of the NDP.

6.8 Sector Plans

Environment and Natural Resources Sector Investment Plan

Forestry is one of the sub-sectors under the Environment and Natural Resources Sector whose ten-year Sector Investment Plan (SIP) runs over the period 2008/09 to 2017/18. Within the Key Result Areas, the forestry sub-sector addresses the following strategic objectives:

Key SIP Result Area	Relevant Strategic Objectives
Sustainable Harnessing/Use of Natural Resources	To improve the ability of forests and trees to yield increases in economic, social and environmental benefits for all people especially the poor and vulnerable now and in future generations
	To effectively conserve and manage wildlife and protected areas in order to contribute to poverty eradication
Clean, Healthy and Productive Environment	To comprehensively establish laws, policies, regulations, standards and guidelines for efficient and effective management of the ENR sector
	To significantly strengthen the capacity of lead agencies and other institutions to implement programmes on environmental management
Productive Natural Resources Base	To progressively make changes in the restoration of environmentally degraded ecosystems
	To promote research for the improvement of Environment & Natural Resources

The Forest Nature Conservation Master Plan

The Forest Nature Conservation Master Plan was developed through the 1990s and published in June 2002. The Plan describes how to integrate the conservation of biodiversity and other environmental protection measures into forestry sector programmes. It makes recommendations for forest management and provides for its own revision as new information becomes available and experience is gained. Specifically, the Plan aims to:

- Outline a broad strategy for integrating nature conservation and other forest management objectives that the relevant forestry agency and its partners can refer to as a guide.
- Describe the specific actions which need to be taken to protect biodiversity and other environmental values within the forest estate, including those related to the establishment, demarcation and management of Nature Reserves; protection activities in other management zones; institutional and financial arrangements; local community involvement; and legislation & policy requirements;

Development Strategy and Investment Plan for the Agricultural Sector

Environment is treated as a cross-cutting issue within the Agriculture Sector Development and Investment Plan, 2010/11 – 1014/15, (Ministry of Agriculture, Animal Industries and Fisheries, 2010). Agricultural activities have major impact on land-use, soil, water, biodiversity and landscape. The specific environmental issues mentioned as having significant implications on the performance of the agriculture sector include:

- Land degradation, including erosion, compaction and overuse;
- Agro-chemical pollution of ground and surface water;
- Loss of forests and wetlands, leading to loss of biodiversity;
- Loss of biodiversity in agricultural landscapes through the introduction of non-native species, among others.

To address such challenges, the investment plan aims at promoting sustainable land management (SLM) practices to increase food production, conserving soil and water, restoring productive natural resources, and enabling farmers and communities to adapt and become more resilient to climate change. Some of the activities proposed include:

- Promote watershed management practices and rehabilitate degraded sites/micro-catchments;
- Promote conventional soil and water conservation practices;
- Promote incentive mechanisms for SLM adoption;
- Promote biomass energy/charcoal saving technologies;
- Improve water supply (for production and domestic uses) to pastoral communities;
- Promote small scale irrigation practices; and
- Promote diversification.

The SIP also aims at promoting research activities under NARO, which houses NaFORRI. In addition, the District Forestry Officers are envisaged to provide forestry advisory services to the farmers under the umbrella of NAADS.

6.9 Inter-governmental Arrangements at the International Level

Forestry in the Millennium Development Goals (MDGs)

Forestry contributes virtually to all the MDGs, but in **Table 15**, only those goals and strategies which directly relate to forestry are listed:

Table 15: Forestry in the Millennium Development Goals

Goal	Targets
Goal 1. Eradicate extreme poverty and hunger	Reduce by half the proportion of people living on less than a dollar a day
	Reduce by half the proportion of people who suffer from hunger
Goal 4: Reduce child mortality	Reduce by two thirds the mortality rate among children under five
Goal 5: Improve maternal health	Reduce by three quarters the maternal mortality ratio
Goal 7: Ensure environmental sustainability	Integrate the principles of sustainable development into country policies and programmes; reverse loss of environmental resources
	Reduce by half the proportion of people without sustainable access to safe drinking water
Goal 8: Develop a global partnership for development	Develop further an open, rule-based, predictable, non-discriminatory trading and financial system Includes a commitment to good governance, development, and poverty reduction — both nationally and internationally
	In cooperation with developing countries, develop and implement strategies for decent and productive work for youth
	In cooperation with pharmaceutical companies, provide access to affordable essential drugs in developing countries
	In cooperation with the private sector, make available the benefits of new technologies, especially information and communications

Non-legally Binding Instrument on All Types of Forests

The United Nations Forum on Forests (UNFF), the main international forum for discussing forestry policy reached an agreement on the Non-Legally Binding Instrument on All Types of Forests in 2007 (UNFF, 2007)· In the Instrument, the Member States committed themselves to work towards achieving progress in the following global objectives on forests by 2015:

i) Reverse the loss of forest cover worldwide through SFM, including protection, restoration, afforestation and reforestation, and increase efforts to prevent forest degradation
ii) Enhance forest-based economic, social and environmental benefits, including by improving the livelihoods of forest dependent people
iii) Increase the area of protected forests worldwide and other areas of sustainably managed forests, as well as the proportion of forest products from sustainably managed forests
iv) Reverse the decline in official development assistance for SFM and mobilize significantly increased, new and additional financial resources for the implementation of SFM

In order to work towards achieving the above global objectives, Member States agreed on 25 national policies and measures and 19 actions on International cooperation and means of implementation**.**

Clean Development Mechanism

The CDM defined in Article 12 of the Kyoto Protocol provides for Annex I Parties to implement project activities that reduce emissions in non-Annex I Countries, in return for certified emission reductions (CERs). The CERs generated by such project activities can be used by Annex I Parties to help meet their emissions targets under the Kyoto Protocol. The CDM was expected to generate investment in developing countries, especially from the private sector, and promote the transfer of environmentally-friendly technologies in that direction.

Reducing Emissions from Deforestation and Forest Degradation

Pursuant to the earlier decisions of the UNFCCC, the Bali Climate Conference in November 2007 agreed to include REDD in the mitigation of, and adaptation to climate change impacts. During the conference, the countries agreed to enhance national/international action on mitigation of climate change through policy approaches and positive incentives on issues relating to REDD in developing countries; and the role of conservation, sustainable

management of forests and enhancement of forest carbon stocks in developing countries (REDD+). To this end, Member Countries were encouraged to explore actions, identify options, and undertake efforts, to address the drivers of deforestation relevant to their national circumstances, with a view to enhancing forest carbon stocks due to sustainable management of forests.

Consequent to this, Uganda is in the process of completing its REDD+ Readiness Preparation Plan (R-PP). It is expected that the R-PP will lead to a process of preparing the country's REDD+ Strategy, and thus make the country an effective contributor to the international climate change efforts. In the process, Uganda will also benefit from restoration and sustainable management of its natural forests.

The United Nations Convention to Combat Desertification (UNCCD)

In its 10-year Strategic Plan (2008-2018) the UNCCD Parties provided for the strengthening of SFM and integrated water management in critical watershed areas in order to maintain ecosystem services in affected mountain areas, to prevent soil erosion and flooding, to increase the size of atmospheric carbon sinks, and to conserve and sustainably use biodiversity. In order to achieve its objectives and strategies, UNCCD has established The Global Mechanism (GM) with the purpose of promoting "*… actions leading to the mobilization and channelling of substantial financial resources, including for the transfer of technology… to affected developing country Parties...*"

To implement its activities relating to forestry, the GM has developed the Forest Finance Programme. The main objective of the Programme is to increase investment flows for degraded forests as a direct contribution to reduction of poverty and enhanced rural development. The specific objective is to promote the rehabilitation of degraded forests as part of the overall efforts to mobilize resources for implementation of the UNCCD.

The programme focuses on degraded forests outside PAs, since the bulk of forest and tree cover is situated outside PAs, where their value to local economies, livelihoods and carbon sequestration has often been overlooked. In many areas these forests have been subjected to uncontrolled harvesting (especially for wood-fuel), arable farming and overgrazing, thus creating land degradation.

Uganda is one of the 4 countries in Eastern and Southern Africa in which the Forest Finance Programme is aiming at:

- Mainstreaming National Action Plans for SLM priorities in national policies, strategies and budgeting processes;
- Enhancing partnerships between governments and development partners for SLM investments;
- Supporting countries to formulate better programmes for SLM investments
- Exploring linkages with GM's strategic programmes and introducing initiatives that can broaden the funding base of National Action Plans for SLM

The United Nations Convention on Biological Diversity (CBD)

The CBD addresses forestry in its expanded Programme of Work on Forest Biological Diversity (COP6, April 2002 - annex to decision VI/22). The Programme constitutes a broad set of goals, objectives and activities aimed at the conservation of forest biodiversity, the sustainable use of its components and the fair and equitable use of the benefits arising from the utilization of forest genetic resources. Key programme goals include:

- To protect, recover and restore forest biological diversity
- To promote the sustainable use of forest biological diversity

- Access and benefit-sharing of forest genetic resources
- Enhance the institutional enabling environment
- Increase public education, participation, and awareness

The EAC adopted a Protocol on Environment and Natural Resources Management

With respect to biological diversity, the protocol provides for:

- Development of mechanisms that ensure sustainable utilization of trans-boundary ecosystems
- Development, harmonization, adoption and implementation of common policies, laws, strategies, plans and programmes relating to the conservation and use of all forms of biological resources, in the Community.
- Protection and promotion of the use of indigenous knowledge that is compatible with conservation or sustainable use of biological resources;
- Management of biological resources outside conservation areas in a sustainable manner;
- Establishment of a system of protected or conservation areas, and to this end, development of common guidelines for the selection, establishment and management of protected or conservation areas.

With specific reference to forest and tree resources, the Protocol sets out provisions as given in **Box 1**.

Box 1: Provisions of the East African Community Protocol on Environment and Natural Resources Management for Forestry under Article 11 (Management of Forest and Tree Resources)

1. The Partner States shall co-operate in all activities relating to development, conservation, sustainable management and utilisation of all types of forests, trees, and trade in forest products throughout the Community.

2. For purposes of paragraph 1 of this Article, the Partner States shall:
   (a) Develop, publish, review and evaluate regularly the effectiveness of national forest policies, programmes and plans;
   (b) Develop common criteria and indicators for sustainable forest management;
   (c) Undertake regular assessment of forests encompassing all forest resources and all forested lands, regardless of ownership;
   (d) Protect ecologically viable forests and forests that have cultural, traditional, aesthetic, historic, spiritual or religious value and also to protect endangered or threatened forest species;
   (e) Encourage local communities to grow and conserve trees and to integrate the growing of trees into farming systems;
   (f) Develop common guidelines for the management of forest resources;
   (g) Regulate and control introduction of alien species, plant pests and diseases, and develop early warning systems for all types of threats to forest resources;
   (h) Promote the growing, processing and sale of valuable medicinal plants;
   (i) Promote the sustainable use of non-wood products;
   (j) Recognize, respect and protect the rights of individuals and communities over their traditional forest-related knowledge and their right to benefit from the utilization of this knowledge; and
   (k) Promote capacity building and public awareness on forests and forest related activities and products and strengthen research and promote data and information exchange of all types of forests and trees in the Community

3. The Partner States shall harmonise and enforce national policies, laws and programmes to promote sustainable forest management.
4. The Partner States shall adopt common national policies and programmes that allow local communities to effectively participate in forest management activities and to benefit from the forest resources.
5. The Partner States shall cooperate, and where necessary, enter into agreements or other arrangements, in the management of transboundary forests ecosystems and protected areas.

7.0 NFP PRIORITIES, OBJECTIVES AND PROGRAMMES

7.1 The NFP Vision and Goal

The Forest Sector study (2010) indicated that the Uganda Forestry Policy (2001) was still relevant and sufficiently takes into consideration key policy requirements, and adequately covers emerging issues such as expanding private forestry and carbon forestry initiatives. The policy is also in conformity with the various national policies, plans and strategies. Therefore, the Vision for the forestry sector remains as stated in the Uganda Forestry Policy (2001) and the NFP (2002), as follows:

"A sufficiently forested, ecologically stable and economically prosperous Uganda"

Similarly, the Goal for the forestry sector remains as follows:

"An integrated forest sector that achieves sustainable increases in economic, social and environmental benefits from forests and trees by all the people of Uganda, especially the poor and vulnerable"

7.2 Objectives of the NFP

The objectives of the NFP focus on the management of tree and forest resources as a business that contributes to economic, social and environmental benefits for all the people of Uganda. In this respect, the main objectives are to:

(a) Enhance the capacity of forestry institutions to enable them effectively perform their mandates
(b) Increase the forest resource base by increasing forest cover to the 1990 levels
(c) Increase economic productivity of forests and employment in the forestry sector
(d) Raise incomes for households through forest-based initiatives
(e) Restore and improve ecosystem services derived from sustainably managed forests

7.3 Priority forest products and services

In line with the National Development Plan, the forestry sector will focus on development of products and services which have high contribution towards social-economic transformation. The "Business Approach" in the NDP provides a re-orientation of forestry resource management with special attention to developing forestry-related enterprises that contribute to economic growth, employment, prosperity and improving public service delivery. Therefore, priority forest products and services have been selected, based on the following criteria.

- Extent to which the product or service will generate business opportunities and thus contribute to increased income at household, local community, LG, and national levels.
- Degree to which the product or service is essential for maintaining and uplifting the wellbeing of Ugandans (employment, household needs, income-generation at local community level) and therefore contribution to peace and security in the country
- Degree to which the product or service is essential in the production processes of other sectors in the economy (multiplier effects)
- Feasibility for production in various locations in the country

In accordance with the criteria above, the following products and services will be promoted under this NFP:

(i) High grade timber and associated products
(ii) Firewood and charcoal (household, commercial and industrial)
(iii) Construction and industrial poles
(iv) Tree seed and planting materials
(v) Non-wood forest products (rattan, bamboo, etc)
(vi) Fruit trees
(vii) Bee products
(viii) Water catchment services
(ix) Biodiversity products (e.g. herbal medicine, wild coffee)
(x) Ecotourism (the forests – water – landscape connection)
(xi) Carbon sequestration services
(xii) Ecological functions through SFM, using forest certification standards
(xiii) Aromatic oils

7.4 Critical NFP priorities for the period 2011-2021

The achievement of the NFP objectives depends on the improvement of the forest resource base and its productivity to counter deforestation and forest degradation, and to step up supply of goods and services that support enterprise development in the sector. Therefore, all efforts in the sector will focus on increasing the quantity and quality of planted trees, and enhancing the productivity of natural forests both within the PAs and on private land. To this end the critical priorities are outlined below:

(i) Forest law enforcement and governance (FLEG)
(ii) strengthening of institutions responsible for forest management
(iii) Planted trees and forests
(iv) Restoration of degraded natural forests
(v) Promotion of forest-based industries and trade

7.5 NFP Programmes

In order to manage the forests to generate the priority products and services above, three categories of programmes have been identified based on their functional contribution:

a. ***Core programmes -*** aimed at increasing the forest base for production of the priority forest products and services
b. ***Support programmes*** - aimed at providing services to improve production, productivity and utilization of the forestry resources
c. ***Cross-cutting issues*** - to ensure that forest management addresses the issues that cut across all national development programmes.

Table 16 is a summary of the Programmes.

Table 16: Summary of NFP programmes

A The core programs	B The support programs	C Addressing Cross-cutting issues
Programme 1: Development of commercial forest plantations	***Programme 6:*** ICT in forest management and advisory services	1. Gender
Programme 2: Promotion and intensification of tree growing on-farm	***Programme 7:*** Forestry education and training	2. HIV/AIDS
Programme 3: Restoration and conservation of natural forests	***Programme 8:*** Forest research	3. Environment
Programme 4: Forest product processing and value addition	***Programme 9:*** Supply of quality tree seeds and planting materials	4. Climate change
Programme 5: Promotion of Urban Forestry	***Programme 10:*** Forest sector institutional development and coordination	
	Programme 11: Forest law enforcement and forest governance	
	Programme 12: Forest financing and resource mobilization	
	Programme 13: Forest certification	

7.5.1 Development of commercial forest plantations

Uganda is experiencing a timber deficit, with the demand for timber and associated products fast exceeding supply. It is estimated that at least 67,000 ha of plantations will be required to produce around 1million M^3 of sawlogs by 2025 (NFA, 2006). To meet the growing needs, tree planting must be taken seriously, with pro-active investment by both Government and non-government actors. The following will be targeted as the major products from commercial forest plantations:

(i) High grade timber and associated products;
(ii) Construction and Industrial poles;
(iii) Industrial fuelwood (firewood and charcoal)
(iv) Carbon sequestration services
(v) Tree seed and planting materials
(vi) Aromatic oils

NFA will continue to establish and maintain quality forest plantations and provide the needed support to the private sector to grow industrial forest plantations. The role of public-private partnership in increasing investment in commercial forest plantations will be stepped up, building on the experience from the SPGS initiatives. Similar incentive schemes to stimulate private sector investment will be developed.

Private investors usually require large blocks of land in order to rationalize costs of their operations. The minimum area (cluster) that would justify overhead costs ranges in the region of 5,000 – 10,000 ha. This area can be in one block or adjacent blocks. This type of land can be found in some FRs and therefore, large scale plantation developers will be encouraged to access lands in CFRs, as well as buy or lease private land for forest plantation development. Local communities will also be encouraged to participate in commercial plantations development through community associations to produce viable quantities of produce.

The government will play a supporting role through guidelines and standards, promotions, demonstrations and information dissemination. The quality of forest management will be improved to take advantage of the emerging local and export markets. This will be through skills training, use of quality planting materials and timely management.

Key strategies for commercial forest plantation development

Strategy	Primary beneficiaries	Responsibility
1. Expand and sustainably manage commercial timber and pole plantations	Large-scale tree growers	Private sector/Government institutions
2. Establish and sustainably manage energy plantations	Large-scale tree growers	NFA, private sector
3. Encourage development of community based out-grower forest plantation schemes around large plantations	Small-scale tree growers; communities	NFA, Private sector

7.5.2 Promotion and intensification of tree growing on farm

Forestry is crucial to the lives of millions of Ugandans, especially the poorest sections of society. Most rural communities depend on forests and trees on-farm for part of their livelihoods. In spite of this importance of forestry, the forests and woodlands continue to disappear. If the current rate of deforestation continues, the economy and the livelihoods of many Ugandans will suffer, especially the rural communities who are exposed to stress and shocks resulting from inadequate supplies of the forest products and services. In turn, the productivity of the human capital will be reduced.

The decentralised forestry services have not yet helped farmers to grow trees on their land. Most on-farm tree growing initiatives have been through the NGOs/CBOs. The DFDs have not effectively recruited staff to support the decentralized forestry service delivery, promote tree planting and protect vulnerable areas and watersheds.

Government is committed to promoting tree growing on farms in all farming systems (Policy Statement #6). Tree growing on farm will be encouraged to optimise the flow of economic, social and environmental benefits from forests and trees to the local communities as well as contribute to improved conservation of forest resources. Increased income will be created at household level by increasing wood stocks on farm through agroforestry and other farm forestry technologies. Growing of trees and woodlots on institutional land, e.g. schools, faith-based organizations, Uganda Prisons, Uganda Police, Uganda Army and institutions of traditional and cultural leaders, etc will be promoted. This programme aims at increasing the on-farm production of various forest products such as poles, firewood, fruit trees, high grade timber, tree seeds and planting materials and aromatic oils. With increased tree cover, there will be improvement of the environmental functions (windbreaks, shade, soil and water conservation, etc). Planting of indigenous trees will also target species of high conservation value such as *Milicia excelsa* (Mvule), mahoganies, *Prunus africana*, rattan, bamboo, etc.

Key strategies for tree growing on-farm

In order to produce the above, the following strategies will be adopted:

Strategy	Primary Beneficiaries	Responsibility
1. Support establishment and management of woodlots, hedgerows, windbreaks, shelter belts and fruit orchards	Small scale tree growers and farmers, especially women and the youth	DFS, NGOs
2. Promote on-farm growing of high conservation value species	Small scale tree growers and the international community	DFS, NGOs

7.5.3 Restoration and conservation of natural forests in protected areas and private lands

Natural forests are important for their multiple uses, which include biodiversity conservation and provision of various forest goods and environmental services (e.g. timber, poles, firewood, charcoal, tourist attractions, and ecological functions, among others). The quantity and quality of these products and services have fast declined over the past two decades, leading to reduced supply of wood and non-wood forest products and the negative impact on the ecological functions.

In order to enhance the conservation of the forest biological diversity, the biodiversity hotspots within PAs and biodiversity corridors on private land will be promoted (Policy Statement #7), with a focus of enhancing their ability to yield financial returns on investment. Under the Forestry Conservation Master Plan, a total area of 810,000 ha was identified as area of prime, core or secondary conservation importance, and progress has been made in demarcating 350,000 ha of strict nature reserves (SNRs) and 460,000 ha of buffer zones for ensuring management of these areas for conservation. Effective protection of these forests will be an important activity if the intended flora and fauna are to be conserved. Special attention will be given to the woodland reserves of high biodiversity conservation values.

Investments will be made in areas of non-consumptive uses of natural forest and woodland resources, such as eco-tourism, recreation, bee-keeping and other initiatives in order to increase the conservation status of these forests.

Restoration processes through forest protection and affirmative silviculture[6] will be fundamental in ensuring recovery of the highly degraded natural forests to yield increased stocks of high grade marketable timber and non-timber products, and improvement of biological diversity of the forests. Activities such as enrichment planting, encroachment planting, protection, liberation tending, etc will receive high priority in order to halt deforestation and forest degradation.

The private sector will be encouraged to tap into the growing opportunities in FBEs in view of the demonstrated financial returns that accrue from both the consumptive and non-consumptive uses of the forests. The PFOs will particularly benefit from producing and supplying various products arising out of sustainable management and conservation of the natural forests. These products include:

(i) High grade timber and associated products
(ii) Ecotourism (forests – water – landscape connection)
(iii) Bee products
(iv) Carbon sequestration services
(v) Water catchment services
(vi) Biodiversity products (e.g. herbal medicine, wild coffee, birds, butterflies)

To encourage PFOs, various incentive schemes will be necessary to address issues likje ownership and protection, boundaries, registration of forests and development of FBEs.

Key strategies for restoration and conservation of natural forests

The following strategies will be used in restoring and managing natural forests sustainably in order to produce the above products and services:

[6] Affirmative silviculture includes enrichment planting, inducement of natural regeneration, liberation tending to promote high conservation value species, etc.

Strategy	Primary Beneficiaries	Responsibility
1. Restore / rehabilitate degraded and deforested natural forests in CFRs and wildlife conservation areas	Institutional produces; large-scale consumers; small-scale consumers and international community	NFA, UWA
2. Promote the restoration / rehabilitation of natural forests on private and communal lands	Small scale producers and consumers; international community (biodiversity corridors)	Private Forest Owners, DFS, NGOs/CBOs
3. Restore / rehabilitate water catchment areas and fragile ecosystems (bare hills, river banks, lakeshores, wetlands)	Small scale produces and consumers; agricultural producers, hydro-power processors, processors of soft drinks, etc)	DFS, Private forest owners
4. Build capacity for community based natural resource/forest management (CBNRM) and collaborative forest management (CFM)	Local communities; institutionalized government producers	DFS, N GOs/CBOs
5. Promote the development of natural forest related enterprises	Local communities; small and medium scale processors;	DFS, NGOs/CBOs
6. Promote conservation of biodiversity in priority forest reserves and wildlife conservation areas	Institutionalized producers and consumers; researchers, local communities; International community;	NFA, UWA
7. Promote management of important biodiversity corridors on private and communal land.	Institutionalized producers and consumers; researchers, local communities; International community;	PFOs, DFS, NGOs/CBOs

7.5.4 Forestry product processing and value addition

The secondary wood and non-wood processing industry comprises both industrial operations and traditional trades. Industrial production of wood-based products for the market is small, relatively unsophisticated and not widely diversified. In contrast, traditional carpentry and joinery trades, as well as artisanal and handicraft trades based on rattan cane furniture, woodcarving, drum making and other wood and non-wood handicrafts, are flourishing with varying sizes of enterprise.

The quality of forest product processing will be enhanced through use of more efficient technologies or practices and value addition to take full advantage of the emerging local and export markets. Private sector involvement will focus on improving technologies for processing forest products such as timber, bee products, aromatic oil, fruits, charcoal, and briquettes. There will also be a deliberate effort to expand and diversify the range of forest products. Harvesting practises will be improved to ensure higher income from forest products.

Key strategies for product processing and value addition

Strategy	Primary Beneficiaries	Responsibility
1. Promote small and medium capacity sawmills with high recovery rates	Wood processors; Government and private producers; timber users	Private sector; NFA; LG
2. Improve harvesting and processing practises for higher revenue returns from natural forests	Private and community forest owners; institutionalized producers;	Private sector; NFA; LG
3. Build the capacity for value addition for processing wood and non-wood forest products	wood and non-wood processors; Government and private producers	Private sector; NFA; LG

7.5.5 Promotion of urban forestry

Urban forestry is important for providing a wide range of environmental services and also tangible benefits of goods needed by the urban population.

Urban forestry may be categorized into:

- Forests gazetted as central or local forest reserves (about 3,600 ha), and located within or near the urban centres
- trees planted on private compounds, along streets and on public access roads within the urban centers
- trees planted and maintained as planned green parks
- tree nurseries within urban areas

The main objectives of gazetting urban Forest Reserves was to ensure sustainable supply of wood resources (e.g. poles, food/spices, herbs/medicines, fibres, fuel wood), protect watersheds, rivers and swamps/wetlands within urban areas, and provide a healthy urban environment.

The majority of Uganda's urban Forests Reserves are strategically located at the head of watersheds from where streams within the urban areas originate or are located on the flood plains of such streams that flow across the city, municipalities and townships. Others offer protection to adjoining wetlands, steep valleys and hills. Therefore, they act as insurance cover to sustainable supply of domestic water in the form of wells, springs, boreholes and pipe water systems within urban centres as they stabilize seasonal fluctuations in the water table and enhance water quality.

Urban forests control urban flooding by reducing storm water run-off, urban soil erosion, and the swamps improve on quality of domestic water supply. The eucalyptus plantations in swamps within these urban Forest Reserves are anti-malarial plantations meant to enhance water drainage within the urban areas and deny breeding places for mosquitoes, thereby contributing to the control of incidences of malaria within the urban centres.

The urban Forests Reserves also enhance the urban landscape, protect urban wildlife/biodiversity, modify urban climate, provide urban green spaces, break the monotony of buildings, control noise levels and air pollution by fumes and smokes from factories and vehicles in urban centres. Urban forests break wind gusts and, at all times, protect buildings/infrastructure from being blown off by strong winds that pass through the city, municipalities and townships.

Urban tree nurseries are an important source of household income and job creation for both skilled and unskilled manpower, and provide planting materials for growing trees for amenity, timber, poles and other uses.

Urban authorities often viewed tree planting as wastage of land for development. Therefore, LGs and urban authority councilors and technical staff will be sensitized on the importance of mainstreaming forestry in urban development plans. Tree growing in urban and peri-urban areas will be encouraged to increase aesthetic and environmental values, and provide opportunities for environmental education. In addition, the growing tree nursery enterprise in urban centres will be supported to produce better quality planting materials. Integration of forestry in urban planning will be an important entry-point for ensuring establishment and management of forest resources. Where they exist, the forest reserves will be given priority to ensure that they provide forest products and services, especially to the urban poor. Additionally, forests on administrative centres (district, county, subcounty and parish headquarters) will be maintained. New areas will be established especially in developing rural growth centres, with establishment of forest parks and urban green landscapes.

Key strategies for urban forestry

Strategy	Primary Beneficiaries	Responsibility
1. Mainstream forestry in urban development plans	Small-scale urban producers and users; urban authorities and local governments	Urban authorities; local governments
2. Manage urban forest reserves	All stakeholders	LGs/Urban authorities; NFA
3. Increase urban tree growing and protection	Small-scale urban producers and users; urban authorities and local governments	Urban authorities; local governments; private sector
4. Support urban tree nurseries to produce quality planting materials	Small- and medium scale nursery producers; tree growers;	Urban authorities; local governments

7.5.6 ICT in Forest Management and Advisory Services

Over the years, the forest sector service delivery has been too inadequate, inconsistent and ineffective on the ground to cause significant social-economic transformation and positive environmental impact. There is need to improve on the delivery of information and advisory services among the various actors within the forestry sector in all areas of Uganda, with emphasis on increased beneficiary satisfaction through:

- Developing, streamlining, simplifying and maintaining forestry information and advisory services to target actors in strategic areas
- Promoting SFM through coordination, delivery and monitoring of the information and advisory services
- the provision of appropriate assistance to enable local people to raise their quality of life by means of increased income
- Building and retaining relationships between and among beneficiaries and service providers

To enhance information exchange among the stakeholders, national and regional forestry stakeholders consultative fora will be established to debate on various forestry issues, exchange information, develop networks and social interaction.

Forest information and advisory services delivery will be improved, with emphasis on promoting SFM and raising the quality of life through forestry enterprises. This strategy will be achieved by ensuring that information and services are delivered by responsive people who know the targeted recipients, work proactively, listen well and can solve problems. Partner organisations (MWE/FSSD, DFS, NFA, UWA, NGOs/CBOs) will work closely to develop, deliver and monitor forestry-related technical solutions and services to support community and private sector forestry developments. The capacity of these service providers (also including NGOs, private consulting & contracting companies, etc.) will also be built to ensure effective delivery of forestry services

Key strategies for ICTs and Advisory services

This programme will be implemented through the following strategies:

Strategy	Primary Beneficiaries	Responsibility
1. Develop and manage user-friendly information management system to collect, process and disseminate forest information	All categories	FSSD, NFA
2. Develop and implement a national forestry communication strategy	All categories	FSSD
3. Establish national and regional forestry stakeholders consultative fora for information sharing and review of forestry sector performance	All categories	FSSD, DFS
4. Build the capacity of service providers (NGOs, private consulting & contracting companies, etc.) to effectively deliver forestry services	All categories	FSSD, NGOs
5. Promote energy saving technologies in wood deficient areas and high population centres	Small-scale rural and urban users (especially women and the youth), including processors	DFS; NGOs
6. Build the capacity of local community institutions to demand for forestry advisory services	Local communities, including women organizations	DFS; NGOs

7.5.7 Forestry education and training

Uganda's training institutions must produce graduates that will be competitive on the employment market. Today, there is greater realisation that forests must be managed with a business understanding and therefore FBEs will become more popular especially among PFOs. Training institutions need to work with the private sector and government institutions directly managing forests in developing training packages which are more practical oriented. Also important is to enhance on-job training for all cadres of forestry staff and stakeholders. Therefore, formal forestry education at the university and technical forestry training institutions will continue but with modification in curricula aimed at enhancing practical skills training. As we move into the East African Community where we expect freedom of labour movement across borders, Uganda's training institutions must produce graduates that will be competitive on the market. To this end, the curricula will be revisited to increase the proportion of time spent on practical skills training.

Formal and informal training in the forestry sector has improved over the last 10 years with the introduction of new courses. However, it has also been noted that the training has been commercialized and is more vulnerable to being compromised on quality standards and competences. Similarly, informal training, which has been largely spearheaded by the NGOs, has gaps in knowledge and skills. There are limited knowledge and practical skills among forestry practitioners in many areas of forestry and natural resource management, such as silvicultural practices, management of protected areas; management and protection of ecologically fragile ecosystems/watersheds ; forestry related enterprises and business development, forestry economics and forest valuation. Forestry education and training has not effectively addressed ethics and codes of conduct in natural resource management.

The NFP will also focus on in-service training for knowledge and skills transfer to staff responsible for forestry management and service providers. On-farm skills training in agro-forestry, forest plantation management and natural forest management (including woodlands) will be

conducted by NGOs and private sector of proven experience (e.g. SPGS, consultants) and Government agencies. Professional training at tertiary institutions will also be designed with practical field orientation to produce forest graduates that meet the current market demands.

Key strategies for forestry education and training

The following strategies will be implemented to provide an effective forestry education programme:

Strategy	Primary Beneficiaries	Responsibility
1. Develop and periodically review curricula for professional and technical forestry training to enhance knowledge, attitude and skills	All categories	FSSD, NFC, Universities
2. Conduct tailored apprenticeship and on-job training for staff of NFA, DFS, FSSD and other forest related organizations to improve their performance	Institutionalized producers	NFA, DFS; FSSD; NFC; private sector; NGOs
3. Promote local community training through farmer field schools and agro-forestry demonstrations	Local communities,	DFS, NGOs
4. Build knowledge, attitude and skills of service providers for effective delivery of forestry services	Service providers; local communities, local governments	DFS; NGOs; FSSD
5. Promote and strengthen the integration of forestry related co-curricular activities in primary and secondary education.	Youth in schools; local communities	DFS; NGOs, School administrations

7.5.8 Forestry research

Forestry research will continue delivering technologies and knowledge needed to improve livelihoods in Uganda through conservation and sustainable management of natural and plantation forests; growing and managing trees-on-farm; developing and promoting tree products and services; integrated pests, diseases, and fire management; recreation, landscapes and urban forestry; mitigation and adaptation to climate change; minimizing biodiversity loss; and any other emerging issues.

The National Forestry Resources Research Institute (NaFORRI) and other research institutions in close collaboration with their partners will establish and implement an effective research agenda, based on best practices and procedures to meet stakeholder needs. Currently, NaFORRI has developed a home and modest infrastructure that supports formal research. In addition, wide linkages have been developed with expertise across the National Agricultural Research System (NARS) in Uganda, the regional and sub-regional organisations, and the international organizations, such as the Consultative Group for International Agricultural Research (CGIAR) system. The forestry research agenda will be developed and implemented through a Research and Development Strategic Plan, with a view to addressing the challenges of how to enhance and sustain livelihoods through forestry, agroforestry, conservation of indigenous tree species and other uses of forest resources, while protecting the environment.

The forest resource managers such as NFA, UWA, DFDs and the private sector will also be encouraged to carry out or commission relevant research that supports forest conservation, development and utilization of forests, and the conservation of biological diversity and genetic resources.

On-farm research will also be promoted through an approach that allows the participation of farmers in the research agenda.

Key Strategies for Research

This programme will be implemented through the following strategies:

Strategy	Primary Beneficiaries	Responsibility
1. Develop and implement Forest Research and Development Strategic Plans through relevant research institutions	All categories	NaFORRI, Universities
2. Undertake species trials for indigenous trees to inform plantation development		NaFORRI, NFA
3. Promote research on-farm	Local communities	NaFORRI,
4. Promote research by forest management institutions	Institutionalized producers and users; local communities	NFA, UWA, DFS
5. Develop and implement a tree improvement programme	Small scale and large scale producers	NaFORRI, NFA
6. Undertake specific studies to fill information gaps	All categories	FSSD, NFA, NaFORRI, NGOs
7. Transfer technologies to forest resource producers and consumers	All categories	NaFORRI, DFS, NFA

7.5.9 Supply of quality tree seed and planting materials

The demand for quality planting materials is increasing due to the increased interest in afforestation and reforestation activities. In the short term, importation of some tree seeds from certified sources especially for commercial plantation development will be encouraged. So far, a few private suppliers are importing seeds from Brazil, Australia and South Africa. In the long term, the development of tree seed stands and undertaking of a tree improvement program will be key to the country's seed and tree planting materials supply.

NFA manages the National Tree Seed Centre (NTSC) whose capacity has been developed over the past years to meet the demand for seed and planting materials. However, NTSC has lost the confidence of its clients by supplying unreliable seed and seedlings. NFA will restore the credibility of the NTSC, and continue to build its capacity so that it effectively supplies quality tree seed and planting materials to meet the increasing stakeholder demand. Other private operators will be encouraged to supplement the supply of quality seeds and planting material under appropriate guidelines and a quality assurance scheme.

The establishment of tree seed stands will be encouraged to reduce dependence on importing seeds and planting materials. Most of the tree seed stands have either been harvested for timber or their management has deteriorated. The seed sources that still exist are of very poor quality and lack appropriate maintenance. Also lacking has been the effort to undertake tree improvement programs for producing quality planting materials. Attempts by NaFORRI in collaboration with the private sector have not yielded much and have been limited to a few species, especially clonal eucalyptus.

Lack of guidelines and monitoring of production and supply of tree seed and planting materials has resulted into springing up of unregulated tree nurseries, most of which are mixing different species in the same beds. There are incidents where seedlings are raised and planted without due regard to site species matching.

It has been established that supply of tree seeds and planting materials is an economically viable venture. Therefore, the involvement of the private sector in production and management of tree seed stands and planting materials will be encouraged under appropriate guidelines and regulations. Priority will also be put on development of skills of the private sector for the purpose.

Key strategies for tree seed and planting materials

This programme will be implemented through the following strategies:

Strategy	Primary Beneficiaries	Responsibility
1. Improve tree seed procurement, testing, storage and distribution	Small and large scale producers and users, including nursery operators	NFA, Private sector
2. Establish and maintain quality tree seed sources	As above	NFA, Private sector
3. Produce quality tree seedlings and other planting materials	As above	NFA, Private sector
4. Promote the multiplication and use of indigenous species of high conservation value	Small scale producers and users; institutionalized producers, local communities	NaFORRI, NFA, Private sector
5. Develop and implement a Seed Certification Scheme	Small and large scale producers and users, including nursery operators	FSSD; NFA

7.5.10 Forest sector institutional development and coordination

The institutional landscape consisting of the Ministry/FSSD, NFA/UWA and DFDs, has failed to deliver on their respective roles and responsibilities, largely because of poor start-up. Institutional development in terms of human resource and provision of operational funds was skewed to favour the establishment of NFA, without parallel effort to build FSSD and DFDs. During the 2-3 years during which NFA was well funded, it was able to show visible impact on forestry. On the other hand, DFDs and the FSSD were under resourced, and thus, they have had little impact.

FSSD was unable to effectively carry out its mandate, leading to weak sector coordination, linkages, networking and partnerships. The cross-cutting nature of forestry means that there is need to coordinate the various stakeholders and provide guidance for their proper functioning. However, it is still important for players within the forestry sector, or those with interests in the sector, to coordinate their work to avoid unnecessary competition for resources, and operate synergistically to optimise the use of resources. It is also important because it reduces the possibilities of conveying conflicting messages to the public, and this bolsters harmony and a common purpose in the development agenda.

Similarly, the DFDs have not been effective in undertaking their functions of developing LFRs and fostering forestry developments outside the other PAs. The designated DFD staff level in each district is 2-3 technical staff, but many recently created districts do not have technical forestry staff. In addition, it is difficult to recruit high calibre staff at the low salary rates offered by LGs. DFD staff are demoralized by the low priority status of forestry in LGs, and by political pressures to go against professional ethics.

On the other hand, the capacity of NFA has been affected by political pressures, poor staff development & retention, and reduced internal and external funding, which have over time,

adversely affected their effectiveness in the management of the CFRs and delivery of services to LGs, the private sector, and local communities.

The development of the institutional framework will be promoted for effective implementation and coordination of forestry sector plans and activities. In particular, the key government institutions in the sector (FSSD, NFA, UWA, and DFDs) will be strengthened to enable them to perform their functions better and allow for effective coordination with the various actors in the sector. Interventions will be based on the understanding that if the capacity of these institutions is increased, the delivery of forestry services will be better. Increase in capacity involves providing an enabling environment for the institutions to function well, including *inter-alia,* staff development; use of appropriate technologies; availability of operational funds; technical guidance and political support.

Every effort will be made to improve on the staffing and financing for FSSD, NFA, UWA, and DFDs) in order to improve their performance. In addition, sector coordination will be promoted at national and regional level to ensure information exchange, networks, partnerships and synergies. The mobilization of the private sector will be promoted through national and sub-national PFOs associations to enhance their capacity for resource mobilization, benefit from economies of scale, and create a common voice for sector developments.

Key strategies for institutional development and coordination

Strategy	Primary Beneficiaries	Responsibility
1. Improve the capacity of lead forestry institutions (FSSD, NFA and DFS) in terms of staffing, skills, equipment, etc, for better performance of their mandates	All categories	MWE/FSSD, MPS, MLG, District local governments
2. Improve coordination, networking and partnerships for all forestry sector stakeholders	All categories	MWE/FSSD, NFA, local governments
3. Improve forestry sector monitoring and evaluation	All categories	MWE/FSSD, NFA, UWA, local governments
4. Promote domestication, coordination and implementation of regional and international forestry related multi-lateral environment agreements (MEAs)	All categories	MWE/FSSD, MWE/CCU, NFA, UWA, NEMA, MAAIF
5. Promote the participation of private sector institutions and communities in forest management	Small and large scale producers; local communities	DFS; private sector; NGOs

7.5.11 Forest Law Enforcement and Forest governance

FLEG is one of the most serious challenges facing the forestry sector today, and is likely to remain so in view of the fledgling nature of Uganda's young democracy. Inadequate implementation of FLEG has contributed to deforestation and forest degradation, depriving Ugandans of the use of forests, and is discouraging sustainable investment in the sector. When there is political capital to be gained, political pressure to act contrary to the interests of SFM is intensified. For example, the ever-growing problem of encroachment in forest reserves, especially during periods of election, gives ample testimony to political interference. On the other hand, when there are no political gains to be obtained, then political decision-makers become indifferent to the needs in the forestry sector.

FLEG will be done through rigorous demonstration of integrity, transparency, accountability and professionalism, in line with established policies and laws. In order to enhance participation, transparency, accountability and efficiency in conducting of public affairs in the forestry sector, interaction between formal institutions, private sector, local communities and civil society organisations will be encouraged. Cooperation and coordination between the formal forestry sector institutions, the Justice Law & Order Sector (police, judiciary, prisons, legal fraternity, LC courts) and the defence sector will be promoted to improve law enforcement and compliance. Formal links with the security agencies will be pursued so as to strengthen law enforcement capacity of the forestry institutions. This will not only help in the PAs, but also in forests on private lands.

Improved FLEG will ultimately lead to control of illegal activities, removal of forest encroachers, forest owners achieving their rightful benefits, and re-demarcation and maintenance of forest reserve boundaries. To enhance accountability within the sub-sector, the forestry legislation process which started with the Forestry Policy in 2001, the National Forestry Plan (2002) and the National Forestry and Tree Planting Act (2003) will be taken to its completion. This will entail gazettement of the Forestry Regulations; preparation and gazettement of LG Ordinances and bye-laws, and development & gazettement of relevant Guidelines & Standards, including the District Forest Services Handbook.

Local communities have demonstrated the ability to enforce forest laws. For example, communities of Sango Bay were able to stop powerful government functionaries' from illegally harvesting timber from the CFR. Therefore, local communities will be empowered to take active participation in law enforcement.

At the community level, where CFM agreements are being implemented, there have been significant tangible benefits to the communities that have encouraged more communities to join and participate in CFM activities. Therefore NFA and other actors will focus on the improvement of forest-edge community wellbeing. The partnerships with the forest-edge local communities through CFM arrangements will be expanded to other CFRs, including NFA plantations and woodland reserves.

Baseline surveys to determine the impact of FBEs under CFM arrangements to the wellbeing of the current community groups will be undertaken to help re-focus CFM arrangements toward increased benefits for the forest-edge local communities. The local communities will be empowered to effectively and efficiently run FBEs, and take on new & feasible ones.

Promotion of professionalism among forestry practitioners will also be emphasised through codes of ethics and professional standards. The process and practice will help in building the confidence of various stakeholders, including the development partners and investors in the forestry sector. Addressing political interference will be achieved by raising the economic profile of forestry with the resultant increase in the relevance of forestry in the political development processes.

Key Strategies for FLEG

Strategy	Primary Beneficiaries	Responsibility
1. Strengthen the development, dissemination and implementation of relevant forestry policies, regulations, standards and guidelines, and the periodic reviews thereof	All categories	FSSD, NFA, UWA
2. Develop and implement participatory Forest Management Plans	All categories	NFA, UWA, LGs
3. Restore the physical integrity of forests in PAs (boundaries opening, eviction of encroachers, etc.)	All categories	NFA, UWA, LGs
4. Promote professionalism among forestry practitioners (codes of ethics, skills, professional standards)	Small and large scale producers and users; institutionalized producers and users	FSSD, NGOs/CBOs, Private sector
5. Develop the capacity of CSOs and local communities to contribute to FLEG and hold government institutions accountable	Institutionalized producers	NGOs
6. Strengthen CFM partnerships and increase benefits for improvement of the wellbeing of forest-edge communities	Institutionalized producers, local communities	NFA, UWA, DFS, NGOs/CBOs
7. Increase collaboration and coordination between formal forestry institutions (including PFOs associations), CSOs and law enforcement agencies for effective FLEG	Institutionalized producers	FSSD, NFA, UWA, DFS
8. Promote accountability within the sector through an annual National Forestry Congress for all stakeholders to take stock in the sector	All categories	FSSD, NGOs/CBOs, Private sector

7.5.12 Forest Financing

Resource mobilisation and distribution is crucial for the function of the key institutions and other players in the forestry sector. Therefore, innovative mechanisms for resource mobilisation will be explored to improve the performance of the key players. As much as possible, forests will be managed in a business-like manner to generate incomes from SFM. In addition, forest management institutions and CSOs will continue to lobby Government and other financial institutions to increase funding for forestry development at all levels.

Funds will be mobilised to stimulate investments in forestry. This will help in ameliorating the effects of the long pay-back period associated with forest investments. The bulk of investors in commercial forest plantations in Uganda are small to medium-scale, and this is likely to remain the same because of the nature of the land holdings (small and fragmented). This is exacerbated by the situation in which most of the financial institutions do not have financing arrangements for forest management projects which are largely long-term. To this end, mobilizing financial resources for managing commercial forest plantations will focus on domestic private sources. In addition, Government, working together with long-term finance institutions will develop long-term financing arrangements for small-holder private sector investment in forest management.

Since tree growing for timber, poles and firewood in a business environment is now generating resources from private sector sources, public funding will shift to support owners of natural forests to enable them to increase financial returns from their forests. Financial resources will also

be mobilised from Government and development partners to meet the cost of delivering public good services, such as watershed management, biodiversity conservation, carbon sequestration, soil protection, climatic amelioration.

Government Budget Framework Papers have got strong positive statements on forestry, and therefore one would expect a corresponding priority rating for forestry. However, when it comes to the allocation of budgetary resources, forestry is ranked very low. The same thing happens at LG levels. In addition, forestry outside the PAs was decentralized without the corresponding financial resources to manage them sustainably. Increasing corruption in government institutions has also negatively affected the goodwill of development partners to finance forestry activities, especially in public forests.

Key strategies for forest financing

Strategy	Primary Beneficiaries	Responsibility
1. Mobilize conditional grants for forestry developments in local governments and from Central government.	DFS, local communities	MWE/FSSD; LGs
2. Operationalise the Tree Fund provided for under the law to support tree growing initiatives	Small and large scale producers; local communities	MWE/FSSD, NFA, DFS, NEMA, UWA,
3. Develop economic instruments (financial, taxes, green levies, etc) for funding forest management and	Institutionalized producers; small and large scale producers; local communities	MWE/FSSD, Private sector
4. Develop innovative and non-traditional enterprises (e.g. Payment for Ecosystem Services,, botanical gardens, butterfly farming, value addition, etc) to diversify incomes & revenue sources	Institutionalized producers; small and large scale producers; local communities	NFA, UWA, PFOs, NGOs/CBOs
5. Promote corporate social responsibility initiatives that support tree growing and natural forest management	Institutionalized producers; small and large scale producers; local communities	Private sector; FSSD, NFA
6. Mainstreaming tree planting in all public and private development programmes and projects	All categories	FSSD, DFS
7. Promote private-public partnerships to enhance forest sector financing	All categories	FSSD, NFA; Private sector; UIA
8. Mobilize long-term low-interest finance from pension funds, insurance and financial institutions for forest developers	Large-scale producers	FSSD, Private sector
9. Mobilise financing from Development partners for specific initiatives like conservation of global biodiversity, carbon sequestration and tree planting	All categories	FSSD, NFA; Private sector, CSOs

7.5.13 Forest Certification

Uganda's production forests have not been certified, and the chains of custody are poorly developed. Therefore, Uganda cannot sell most of its forest products on some of the international markets because consumers require products which are certified. Some steps have been taken in this direction, but they are still in their formative stages.

Emerging sources of forest revenues (e.g. carbon, certified bee products, certified charcoal, etc.) require independent monitoring of SFM criteria and indicators. To this end, forest management standards composed of criteria and indicators which have been agreed by consensus of all stakeholders will be developed and implemented. The quality of the standard will also meet internationally accepted principles of SFM in order for the producers to benefit from the international marketing arrangements based on SFM. The private sector will be introduced to the advantages of certification of their natural forests and plantations to promote SFM and access international markets that require certified forest products.

Government will invest in natural forests in order to manage them sustainably. The aim will be to produce internationally certified forest products. In addition, forest production like certified emissions reductions require a set of standards. These standards will be adopted for afforestation and reforestation projects under CDM and REDD+

Uganda will undertake forest certification using the phased approach within the framework of the Forest Stewardship Council (FSC). Starting with selected forests, lessons will be generated that will guide further expansion of the certification programme.

Key strategies for forest certification

Strategy	Primary Beneficiaries	Responsibility
1. Develop systems for independent verification of legal sources of marketable forest products	Large scale producers and users; institutionalized producers and users	Private sector; NGOs; FSSD, NFA
2. Establish and support a National Working Group under the auspices of the FSC	All categories	FSSD; private sector; NGOs
3. Establish and support the formation of a National Initiative under auspices of the FSC	All categories	National Working Group
4. Establish and maintain linkage with the FSC on matters of certification, monitoring/audits and markets	All categories	National Initiative
5. Develop the national standards, criteria and indicators in accordance with FSC principles and generic criteria & indicators	All categories	FSSD, NFA
6. Publicize and develop markets for the forest certification initiative	All categories	FSSD
7. Manage selected natural forests and plantations using SFM principles and acquire FSC certification in a phased manner	Institutionalized producers; private/community forest owners	NFA
8. Organize and encourage PFOs to produce for the markets that take products from forests managed under the certification scheme	Large scale producers and users; institutionalized producers and users	Private sector; FSSD, NFA,
9. Build the capacity of public & PFO organisations, and individuals to implement SFM	Large scale producers and users; institutionalized producers and users	FSSD, NFA; LG; NGOs

7.6 Addressing Cross-cutting Issues

7.6.1 Gender

In Uganda, firewood and water for domestic use is usually collected by women and children. Therefore, the Programmes on "watershed management" and "pole & fuelwood plantations" will be implemented with close participation of women and school children. Particular attention will be paid to women and the girl-children who have to walk long distances to access products, especially for domestic use.

On the other hand, charcoal burning is mainly carried out by male youths, while retail trade and use of charcoal at home are mainly carried out by women in urban centres. Therefore the Programme of sustainable charcoal & fuelwood processing & use will target youth and women.

The majority of employment in the wood trades is dominated by male youth, while women specialise in processing of non-wood forest produce. Capacity building programmes will be tailored with these considerations in mind.

Key strategies for incorporating gender

Strategy	Primary Beneficiaries	Responsibility
1. Prepare programmes that will specifically benefit rural women, youth, the elderly and children	small scale producers and users; local communities	NGOs; FSSD, NFA
2. Gender training to support equitable access to and control over benefits in forest management activities	Service providers on gender issues at national, district and local levels	MEW, FSSD, NFA, DLG, NGO, UWA
3. Have a gender specialist within any Project/program Implementation Unit	small scale producers and users; local communities	MEW, FSSD, NFA, DLG, NGO, UWA
4. Have gender disaggregated data collection, collation, analysis and reporting	small scale producers and users; local communities	MEW, FSSD, NFA, DLG, NGO, UWA

7.6.2 HIV/AIDS

HIV/AIDS has adverse effects on all aspects of the economic and social well-being of society. Therefore, HIV/AIDs education will be incorporated in all training and public education programmes during implementation of this NFP.

Key strategies for incorporating HIV/AIDS education

Strategy	Primary Beneficiaries	Responsibility
1. Prepare standard training materials for stakeholder education	All categories	NGOs; FSSD
2. Conduct studies regarding the palliative nature of herbal medicines	All categories	NGOs; Private sector

7.6.3 Environment

Environmental issues to be considered include human-induced environment-related disasters like human settlement, land degradation, pollution control, hazardous waste management, effluent management, waste disposal, and the management of river banks and lake shores, among others. These concerns will be incorporated and addressed through Environmental Impact Assessments in accordance with the National Environment Act, CAP 153.

Key strategies for incorporating environment

Strategy	Primary Beneficiaries	Responsibility
1. **Conduct studies on specific functions of forestry in conservation of the environment**	All categories	NEMA; NFA
2. **Promote EIAs for major forest operations (e.g. commercial plantations, timber harvesting, ecotourism, etc.)**	All categories	NEMA; NFA; Private sector;

Climate change

The negative impacts of climate change are forecast to increase, and therefore, weather and climate have been mainstreamed into the forestry sub-sector. Forests and trees act as sinks for green house gas emissions, and are the most visible frontline assets available for Uganda for mitigation of climate change effects. Therefore tree growing and sustainable management of natural forests will not only enable Uganda to make its due contribution to the fight against climate change through CDM and REDD initiatives, but it will also bring in income to the forest owners who manage their forests according to SFM standards.

GOU and partners efforts to promote forestry production and productivity has a comparative advantage of mitigating climate variability and climate change while at the same time improving on food security, reducing rural employment and rural poverty. Despite the fact that forestry is being affected by climate variability/change impacts, it also contributes to GHG emissions. Changes in land use and clearing of forests represent 17.4% of total global GHG emissions.

Because forestry capture carbon through photosynthesis in terrestrial ecosystems, they have very high potential for reducing emissions and enhancing carbon sinks. It is estimated that the biophysical mitigation potential of forestry is estimated to average 1.5 GtC eqv./yr (5.4 Gt CO2 eqv./yr, IPCC 2001) without the realization of a substantial part of this mitigation. Therefore finding an efficient mix of mitigation and adaptation solutions through forestry development should be a priority policy issue.

FAO submission to UNFCCC in 2009 noted that "Perhaps no sectors other than agriculture, forestry and fisheries have the potential to contribute so directly to the provisions of Article 2 of the United Nations Framework Convention on Climate Change (UNFCCC): the ultimate objective of the Convention is stabilization of GHG concentrations in the atmosphere at a level which ensures that food production is not threatened and enables economic development to proceed in a sustainable manner."

Key Strategies for incorporating climate change

Strategy	Primary Beneficiaries	Responsibility
1. **Prepare and implement the REDD+ Strategy**	Large scale producer; institutionalized producers; small-scale producers	Private sector; NGOs; NFA; UWA; FSSD; PFOs
2. **Scale up afforestation and reforestation projects in line with CDM arrangements**	All categories	Private sector; NGOs; NFA; PFOs
3. **Promote climate change mitigation and adaptation implementation through public-private partnership arrangement**	All categories	Private sector; NGOs; NFA; PFOs

8.0 FINANCING ARRANGEMENTS FOR THE NATIONAL FOREST PLAN

8.1 Indicative budget for implementing the NFP

Table 17 summarizes the indicative budget required for the implementation of the NFP. The total budget over the ten years is UGX 395.151 billion, progressing with the intensity of activities from 13.3 billion in Yr1, reaching 68 billion at Yr 10. This budget includes the work of other government players apart from the traditional institutions that manage forests.

Table 17: **NFP Summary Indicative Budget (excluding Salaries), 2011-2020**

(UGX millions) US$1 UGX equivalent 2,200

	Programme														
		Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10	Total	GoU	Private Sector	CSOs
1	Development of commercial forest plantations	8,400	16,800	25,200	33,600	42,000	50,400	58,800	67,200	75,600	84,000	**462,000**	108,900	353,100	0
2	Promotion and intensification of tree growing on farm	4,160	8,320	12,480	16,640	20,800	24,960	29,120	33,280	37,440	41,600	**228,800**	117,040	22,000	89,760
3	Restoration and conservation of natural forests	825	1,650	3,000	4,425	5,900	7,775	9,450	11,725	13,600	16,750	**75,100**	52,000	9,575	13,525
4	Forest product processing and value addition	70	120	240	317	504	926	1,023	1,465	1,695	1,835	**8,195**	1,494	6,636	65
5	Urban Forestry	770	1,122	1,474	1,827	2,179	1,700	1,910	2,120	2,330	2,540	**17,972**	8,552	9,420	0
6	Forest Information and Advisory Services	800	1,132	1,627	1,827	2,395	2,310	2,395	2,310	2,395	2,310	**19,500**	10,378	290	8,915
7	Forestry training	1,780	1,880	1,900	1,960	2,020	2,120	2,140	2,200	2,260	2,320	**20,580**	10,460	2,100	8,020
8	Forestry research	1,805	2,009	2,014	2,015	2,215	2,085	2,085	2,085	2,085	2,085	**20,482**	18,482	0	2,000
9	Supply of quality tree seeds and planting material	290	530	770	975	1,215	265	265	265	265	265	**5,105**	4,620	485	0
10	Forest sector institutional development and coordination	862	920	412	400	100	100	100	100	600	900	**4,494**	3,070	0	1,424
11	Forest Law Enforcement and Forest governance	2,790	2,945	3,376	3,656	4,338	3,672	3,897	3,762	3,987	3,987	**36,412**	27,778	970	7,663
12	Forest financing	1,110	2,110	2,030	2,020	320	320	320	320	320	320	**9,190**	6,550	0	2,640
13	Forest Certification	300	650	700	850	800	850	870	790	790	790	**7,390**	5,225	1,275	890
	Total UGX	**23,962**	**40,188**	**55,222**	**70,512**	**84,785**	**97,483**	**112,375**	**127,622**	**143,367**	**159,702**	**915,219**	**374,550**	**405,851**	**134,902**
	US$ Equivalent	**10.89**	18.27	25.10	32.05	38.54	44.31	51.08	58.01	65.17	72.59	**416.01**	170.25	184.48	61.32
Percentage Contribution													**41**	**44**	**15**

8.2 Sources of funding

To address the financial constraints related to the long pay-back period of forestry investments, funds will be mobilised to stimulate investments in forestry developments. The funds will be mobilised through:

- Increased capacity to generate revenues from the forest products through value addition and diversification.
- PES, especially through carbon sequestration and watershed protection services;
- Private sector sources (domestic and external)
- Public funds, including Official Development Assistance (ODA), most of which are disbursed through Medium Term Expenditure Frameworks that are approved by the Water and Environment Sector Working Group
- Government instruments like guaranteeing loans and provision of tax relief for the private sector
- Public-Private Partnerships, especially in commercial timber and energy plantations
- Long-term loans from pension funds and development banks

It is envisaged that 41% of the total NFP budget will be funded by Government through the Medium-Term Expenditure Framework; 44% will be mobilized through the private sector, and 15% will be mobilized through the civil society organizations.

8.3 Dangers of not funding the NFP programmes

If the Government (includingLGs and ODA) does not fund the forestry sub-sector, the trend in forest loss will escalate, leading to the following:

1. **Negative impacts of climate change** evidenced by increasingly dry to desert conditions, high incidences of floods and the attendant health and nutritional problems.

2. **Declining biodiversity,** thus affecting the basis of proper functioning of ecosystems that support life at local, national and global levels through its products and services;

3. **Reduced energy supply** for domestic use, the manufacturing industry and the service sector, including scarcity of woodfuel for small-scale processing industries, such as brick-making, bakeries, pottery, hotels and schools. This will lead to increased costs of production and thus lower Uganda's competitive edge in the region.

4. **Increased hardships for the poor** who directly derive 27 % of their cash income from forests.

5. **Reduced and low-quality water supply for domestic and industrial use** as the water reservoirs (lakes, rivers and wetlands) become polluted and eventually silt up. Water tables would become lower, leading to drying up of wells, springs and boreholes, and the consequent increased costs of providing water to the population and livestock.

6. **The Government's Water for Production Programme** in support of PEAP would be rendered unviable because it requires forests as natural regulators and reservoirs of water flow. The whole country would therefore be rendered unviable for cattle grazing and agriculture**.** For example, the Uganda National Household Survey 2005/2006 (Agriculture Module) revealed that 43 percent of all national crop plots suffered from damage, mainly due to rain shortage (19 percent), followed by crop disease (10 percent).

7. **Reduced raw materials, especially timber for construction** would undermine the fast growing construction industry. This would directly affect economic growth and employment opportunities.

8. **Escalating import bills.** IUCN (2001), for example, estimated that if kerosene was used instead of charcoal in urban households, there would be an annual increase in the national import bill by US$180 million. Such a move would also lead to loss of jobs by poor people involved in woodfuel (charcoal and firewood) income-generating activities.

9. The environment in the fast-growing urban areas will become more polluted and a **danger to people's health**. This would lead to increased costs of providing health care, higher incidences of respiratory diseases and the consequent increased misery for the poor living in urban areas.

Some of the effects of the Government not funding the forestry sub-sector can be mitigated by promoting private sector investment. Since most of the investment in forestry is of a public nature, however, it will not be possible to attract sufficient private sector investment in the next 10 years. Therefore, the Government and its development partners will have to invest directly in forestry over the coming years. Government should also continue to go into partnerships with the private sector.

9.0 INSTITUTIONAL FRAMEWORK FOR THE NFP IMPLEMENTATION

The roles of lead institutions in the forestry sector were defined during the forestry sector reform, and aimed at strengthening sector coordination and performance. It is considered that the roles and responsibilities as stated in the 2002 NFP are clear and still valid for the implementation of this revised NFP. It is extremely important that the different institutions that will be involved in the implementation of the NFP have a clear understanding of their roles. **Table 18** summarizes the functions of the key institutions in the sector

Table 18: Key Institutions in the Forestry Sector

Institution	Responsibilities in the forest sector
Enabling Ministries, Departments and agencies,	
Ministry of Water and Environment / Forestry Sector Support Department	• Formulation and oversight of appropriate policies, standards and legislation for the forest sector • Co-ordination and supervision of technical support and training to local government • Inspection and monitoring of local government and the NFA performance in forest sector development • Co-ordination of the NFP and cross-sectoral linkages • Mobilisation of funds and other resources for the forest sector • Promotion, public information and advocacy for the forest sector
Ministry of Finance, Planning and Economic Development	• Provision of policies, standards and guidelines and information that are needed for planning • Sector budget allocations • ensure coherence of forestry policy and practices • Oversee the NFA performance contract • mobilise funds and other resources • Provide information on green accounting. • Macro-economic stability through ensuring sustainable natural resources through extraction levies and licenses. • Implementation of social and environment assessments to facilitate planning and economic stability. • Provision of incentives and disincentives (Economic Instruments) for forestry development
Ministry of Tourism, Trade and Industry	• Promotion of international markets that focus on the environmentally safe products (e.g. organic coffee, vanilla, pineapples, honey) and are willing to buy at a premium prices. • Domestication of the Multi-lateral Environmental Agreements (MEAs) is important in the control of trans-boundary trade, e.g. under CITES. • Supply of the capital base (natural resource and biodiversity) on which the industry is based. • Regulations, guidelines, standards and provisions for effective management of biodiversity and ecosystem management for effective survival of tourism industry.
Ministry of Energy and Mineral Development	• Policies, laws, regulations, standards and guidelines for sustainable production and provision of energy from various sources. • Biomass energy conservation technologies • Promotion of energy substitution (solar, hydro power, petroleum, etc) • Environmental related funding mechanisms (global funds) that support the energy sector, e.g. CDM, Voluntary Markets, PES etc

Institution	Responsibilities in the forest sector
Ministry of Agriculture, Animal Industry and Fisheries	• Agriculture and forestry interface • Delivery of advisory services – to mainstream forestry in NAADS • Enabling policies, laws and regulations and standards provide guidance for good agricultural practices that enhance sustainable land management • Promotion of agro-forestry practices on-farm • contribute forestry advice in the implementation of UNCCD
Ministry of Education and Sports	• Integration of forestry management in formal education for sustainable development through development of curriculum • Demonstration of forestry management in schools for good practices. Schools serve as a natural laboratory for good learning environment • Promotion of forestry education in schools, colleges and vocational training institutes • Promotion of forestry-focussed school programmes and initiatives • Promotion of tree growing on school/college land (woodlots, aesthetic, windbreaks, roadside planting, etc)
Ministry of Gender, Labour and Community Development	• Enabling policies, laws, regulations and standards related to labour and gender concerns • Community mobilisation
National Environment Management Authority	• Control of forestry activities in relation to environmental legislation • Provide environmental planning framework through the National Environment Policy and National Environment Action Plan (NEAP) • Supports local governments in the development and implementation of the District Environment Action Plans (DEAPs). The DEOs provide a linkage in implementing forestry components of DEAPs • Provides guidance and advice on forestry EIAs
Ministry of Local Government	• Decentralised services through local government structures • Ensures coherence of forestry policy and practice • Provides support for District Forestry Services • Performance monitoring of local governments
Ministry of Public Service	• Public sector reforms • Strengthening staffing levels of FSSD and DFS • Monitoring sector institutional performance
Ministry of Internal Affairs (Police, Prisons)	• Build capacity for enforcement of environmental laws and regulations both within Justice Law and Order Sector and within civil society for community management of ecosystems • Enforcement of forest laws • Promotion of tree growing initiatives on institutional land (woodlots, aesthetic, windbreak, roadside plating, etc)
Ministry of Defence	• Promotion of tree growing on institutional land (woodlots, aesthetic, windbreak, roadside plating, etc)
Uganda Revenue Authority	• Taxes on forest products, businesses and trading
Uganda Investment Authority	• Investment promotion in forestry-based businesses, including plantation development and processing
National Forestry Agencies	
National Forestry Authority	• Management of CFRs in partnership with private sector and local communities • Advisory, research or commercial services on contract • Seed supply (NTSC) • National forest inventory and other technical services (NBS)

Institution	Responsibilities in the forest sector
Uganda Wildlife Authority	• Management of the forest resources in national parks, wildlife reserves and wildlife sanctuaries (about 50% of the gazetted forests • Joint-management with NFA of some central forest reserves under this management status
NARO/NaFORRI	• Research and development • Promotion of forestry technologies
Universities and forestry colleges → **MUFFNC** → **Other universities** → **Nyabyeya Forestry College**	• Forestry training • Research
Decentralised forestry services	
Local governments and Urban Authorities	• Establish District Forestry Services • Strengthen forestry in production and environment committees and District Development Plans • Implement international and national policies on forests • Permits, licence fees and tax collection • Mobilise funds for forestry development • Develop and enforce bye-laws • Support and quality control of forestry extension, brokering between farmers and service providers, providing market information • Manage LFRs in partnership with communities and private investors • Land administration, surveying, approval of Community Forests
Private sector and civil society organizations	
Private Sector → **forest owners,** → **tree growers and other investors,** → **communities,** → **forest industries,** → **traders in forest products**	• Forest management and tree farming investments on private land • Forest investments in CFRs on rented land • Collaborative Forest Management of CFRs • Wood and NWFP processing • Trade in forest products • Efficient use of fuelwood
Civil society organizations → **CBOs** → **NGOs** → **Media organizations** → **Faith-based organizations** → **Institutions of traditional and cultural Leaders**	• Advocacy for increased understanding of the role of forests in national and local development • Promotion of government accountability with regard to use of resources and delivery of services • Participating in partnership arrangements for management and utilisation of forests • Public education, information dissemination, • training of local communities, private forest owners and resource managers • Action research • Advisory service delivery • Mobilise local communities to participate in the development process

10.0 MONITORING AND EVALUATION (how will we know we have arrived?)

10.1 Indicators of Achievement

Narration	Indicator	Means/sources of Verification	Lead Responsibility
Goal: An integrated forest sector that achieves sustainable increases in economic, social and environmental benefits from forests and trees by all the people of Uganda			
Objectives			
1. Enhance the capacity of forestry institutions to enable them effectively perform their mandates	(i) Positive public perception of performance for forestry institutions and organisations increasing	reports of bi-annual studies carried out independently of government institutions	Uganda Forestry Working Group; Uganda Forestry Association
	(ii) Proportion of the NFP operations budget funded from the private sector increasing	reports of annual forest sector investment assessment studies	FSSD
	(iii) Public funding of government forestry institutions disbursed in accordance with the NFP Budget	annual sector performance review reports	FSSD
2. Increase the forest resource base by increasing forest cover to the 1990 levels	(i) area of forest cover expanding	reports of biomass studies done once every 5 years	NFA
	(ii) Rate of deforestation decreasing	reports of biomass studies done once every 5 years	NFA
3. Increase economic production and productivity of forests and employment in the forestry sector	(i) area of commercial forest plantations and woodlots increasing	annual reports	NFA, national private forest owners associations
	(ii) area of well-stocked tropical moist forests increasing	reports of biomass studies done once every 5 years	
	(iii) No. of people formally employed in forestry and related work increasing	household surveys	UBOS
	(iv) total economic value of forestry resources increasing	report of a study carried out once every five years	FSSD
	(v) Value and diversity of forest products from sustainably managed forests traded on the market annually increasing	o Annual independent studies o annual reports UBOS reports	FSSD UBOS
	(vi) 80%of forest products traded on the market coming from independently verifiable legal sources	Independent verification reports; NFA and DFO's annual reports	NFA; DFDs

Narration	Indicator	Means/sources of Verification	Lead Responsibility
4. To raise incomes for households through forest-based initiatives	(i) Household income generated from forestry-based initiatives increasing	Household surveys	UBOS
	(ii) number of community groups engaged in forest-related development projects in each district increasing	○ annual reports ○ studies done once every 3 years in each district	DFDs
	(iii) diversity of forest-based products marketed expanding	Household survey	UBOS
5. To restore and improve ecosystem services derived from sustainably managed forests	(i) area of natural forests under restoration management increasing	annual reports; ○ comprehensive study once every five years	DFDs; NFA
	(ii) area of forests under community-based watershed management programmes at district level expanding	○ annual reports	FSSD
	(iii) 250,000 ha of natural forests in forest reserves and 75,000 on private lands managed under legally acceptable forest management standards	annual reports; independent verification reports	NFA
	(iv) Positive public perception of stakeholder participation in decision-making in key forestry institutions & organisations increasing	bi-annual studies	Uganda Forestry Working Group
	(v) National SFM standards developed in line with FSC generic standards and gazetted	Uganda gazette	FSSD; NFA

10.2 Programmes and Targets

The strategies below will be implemented not only by the traditional forest sector institutions but also by those institutions that have included forestry and related activities in their plans contained in the NDP.

Programmes	Strategy	Target
1. Development of commercial forest plantations	(a) Expand and sustainably manage commercial timber and pole plantations	(i) 60,000 ha of commercial timber and pole plantations (utility poles) established
	(b) Establish and sustainably manage energy plantations	(ii) 25,000 ha of commercial energy plantations established
	(c) Encourage development of community-based out-grower schemes around large plantations	(iii) 5,000 ha of plantations established through out-grower schemes

Programmes	Strategy	Target
2. Promotion and intensification of tree growing on-farm	(a) Support establishment and management of woodlots, hedgerows, windbreaks and shelter belts	(i) 40,000 ha of woodlots established by household, (ii) 5,000 Km of hedgerows established by households (iii) 5,000 ha of windbreaks and shelter belts established
	(b) Promote on-farm growing of high conservation value species	(i) 2,000 ha of at least 5 high conservation value tree species planted
3. Reforestation and conservation of natural forests	(a) Restore / rehabilitate degraded and deforested natural forests in CFRs and wildlife conservation areas	(i) 20,000 ha of CFRs recovered from encroachers restored through tree growing and effective protection
	(b) Promote the restoration / rehabilitation of natural forests on private and communal lands	(i) 5,000 ha of degraded natural forests on private land re-planted
	(c) Restore / rehabilitate water catchment areas and fragile ecosystems (bare hills, river banks, lakeshores)	(i) 20,000 ha of community water catchment areas and fragile ecosystems being managed for water and soil conservation
	(d) Build capacity for community based natural resource forest management (CBNRM) and collaborative forest management (CFM)	(i) At least 200,000 ha of CFRs being managed under CFM
	(e) Promote the development of natural forest related enterprises	(i) At least three natural forest FBEs promoted
	(f) Promote protection and conservation of biodiversity in priority forest reserves and wildlife conservation areas	(i) At least 20% of forest permanent estate demarcated and managed as Strict Nature Reserve, and 30% as Buffer Zone (ii) The permanent forest estate is effectively protected against encroachment, and other illegal activities
	(g) Promote management of important biodiversity corridors on private and communal land.	(i) Incentives developed to promote protection of at least 500,000 ha of natural forests on private land within priority biodiversity corridors
4. Forest products harvesting, processing and value addition	(a) Promote small and medium capacity sawmills with high recovery rates	(i) 50,000 cu. metres of timber harvested annually from TFM of central forest reserves according to SFM guidelines (ii) 500 ha of plantation forest harvested annually from CFRs
	(b) Improve harvesting and processing practises for higher revenue returns from natural forests	(i) 50% of the tops and lops of trees harvested from natural forests utilized through innovative practices (ii) Improved charcoal production technologies piloted at least 3

Programmes	Strategy	Target
		sites (iii) 10,000 ha of woodlands harvested for sustainable charcoal production
	(c) Build the capacity for value addition for processing wood and non-wood forest products	(i) Wood products utilizing sawdust, off-cuts and other wastes developed and marketed (ii) 5 regional CFM groups and PFO Associations processing bee products for the market (iii) 3 regional units processing tree fruits (iv) 1 processing unit for aromatic oils
5. Promotion of Urban Forestry	(a) Mainstream forestry in urban development plans	(i) 50% of local governments/ urban authorities sensitized on urban forestry
	(b) Manage urban forest reserves	(i) 3,000 ha of FRs in urban and peri-urban areas developed for forestry purposes (green parks, forest recreation areas, etc.)
	(c) Increase urban tree growing and protection	(i) 100 urban & peri-urban settings planted with at least 10 Km of avenue trees (ii) At least 100 rural growth centres managing at least one urban green park/garden
	(d) Support urban tree nurseries to produce quality planting materials	(i) 600 private tree nursery operators trained in quality nursery production
6. ICT in Forest management and advisory services to local communities	(a) Develop and manage user-friendly information management system to collect, process and disseminate forest information	(i) Functioning information centre for forestry and trees established at FSSD (ii) 10 Functioning regional information centres for forestry and trees established
	(b) Develop and implement a national forestry communication strategy	(i) A National Forestry Communication Strategy in place and being implemented
	(c) Establish national and regional forestry stakeholders consultative fora for information sharing and review of forestry sector performance	(i) One national consultative forum bi-annually (ii) 4 regional consultative forums bi-annually
	(d) Build the capacity of service providers (NGOs, private consulting & contracting companies, etc.) to effectively deliver forestry services	(i) 600 service providers at district level trained
	(e) Build the capacity of local community institutions to demand for forestry advisory services	(i) At least 100 districts providing advisory services in forestry to local communities
7. Forestry training	(a) Develop and periodically	(i) Forestry Curricular for Universities

Programmes	Strategy	Target
and education	review curricula for professional and technical forestry training to enhance knowledge, attitude and skills	and NFC comprehensively reviewed once every 5 years
	(b) Conduct tailored apprenticeship and on-job training for staff of NFA, DFS, FSSD and other forest related organizations to improve their performance	(i) At least 200 staff of key forest-related institutions and organisations (GoU & CSOs) undergoing at least one apprenticeship & on-job training event annually.
	(c) Promote local community training through farmer field schools and agro-forestry demonstrations	(i) At least 400 farmers given on-farm skills training in tree growing and agro-forestry practices annually (ii) At least 400 private forest owners trained in practical natural forest management practices annually
	(d) Build knowledge, attitude and skills (KAS) of service providers for effective delivery of forestry services	(i) At least 100 service providers trained annually
	(e) Promote and strengthen the integration of forestry related co-curricular activities in primary and secondary education.	(i) Forestry practices integrated into curriculum for all Teacher Training Institutions (ii) 4,000 primary and secondary schools engaged in forestry-related key co-curricular activities
8. Forestry research	(a) Develop and implement Forest Research and Development Strategic Plans through relevant research institutions	(i) At least 5 NFP related research projects initiated by NaFORRI and other research institutions per year, applying an enterprise approach
	(b) Undertake species trials for indigenous trees to inform plantation development	(i) Trial plots established and maintained for at least three indigenous species of high conservation value
	(c) Promote research on-farm	(i) At least 20 contact tree growers participating in on-farm research
	(d) Promote research by forest management institutions –	(i) At least 2 research initiatives conducted every year by key forest management institutions and their partners (NFA, UWA, DFOs, key NGOs)
	(e) Develop and implement a tree improvement programme	(i) Tree improvement programme for selected species conducted at 10 sites
	(f) Undertake specific studies to fill information gaps	(i) At least 2 national level studies conducted annually to fill information gaps in the forestry sector
	(g) Transfer of technologies	(i) At least 2 research technologies disseminated through end-user outreach programmes
9. Supply of quality tree seeds and planting materials	(a) Improve tree seed procurement, testing, storage and distribution	(i) 6,000Kg of quality tree seed of assorted species distributed annually

Programmes	Strategy	Target
	(b) Establish and maintain quality tree seed sources	(i) 500 ha of quality seed stands established
	(c) Produce quality tree seedlings and other planting materials	(i) 250 million seedlings of various species produced
	(d) Promote the multiplication and use of indigenous species of high conservation value	(i) 500,000 seedlings/planting materials of at least five indigenous species supplied annually
	(e) Develop and implement a Seed Certification Scheme	(i) Tree seed certification scheme developed with Uganda Seed Agency
10. Forest sector institutional development and coordination	(a) Improve the capacity of lead forestry institutions (FSSD, NFA and DFS) in terms of staffing, skills, equipment, etc, for better performance of their mandates	(i) Functional analysis of the key government forestry institutions (FSSD, NFA, DFOs) undertaken (ii) Recommendations of the functional analysis implemented
	(b) Improve coordination, networking and partnerships for all forestry sector stakeholders, including a regional approach to managing forests that cross national borders	(i) Multi-sectoral Coordination Structure in place and functional (ii) Joint Forestry Sector Review conducted annually (iii) An MoU developed between NFA and UWA for effective management of the protected areas (iv) A regional instrument for managing cross-border forests
	(c) Improve sector monitoring and evaluation	(i) Baseline studies conducted to facilitate monitoring of the NFP (ii) Detailed forestry sector monitoring and evaluation System in place and functional (iii) NFA Performance Contract revised, monitored and evaluated annually
	(d) Promote domestication, coordination and implementation of regional and international forestry related multi-lateral environment agreements (MEAs)	(i) Functional coordination mechanism for each MEA (ii) A national coordination structure for all MEAs established and functional
	(e) Promote the participation of private sector institutions and communities in forest management	(i) One national level PFOs Association and at least 10 District-level associations established & operational
	(f) Develop guidelines for management of forests that cross LG boundaries	(i) Guidelines gazetted
11. Forest law enforcement and forest governance	(a) Strengthen the development, dissemination and implementation of relevant forestry policies, regulations, standards and guidelines,	(i) Forestry regulations finalised and gazetted (ii) Forestry guidelines and standards developed, disseminated and being implemented

Programmes	Strategy	Target
	and the periodic reviews thereof	(iii) District Forestry Services Manual operationized
	(b) Develop and implement participatory Forest Management Plans	(i) 50 FMUs for CFRs with published forest management plans (with major reviews in YR 5-7) (ii) At least 100 FMPs prepared and published at District level for LFRs (with major reviews in YR 6-10) (iii) At least 50 Districts with District Forestry Development Action Plans approved and integrated in DDPs (iv) 50 private/community forests using legally acceptable FMPs
	(c) Restore the physical integrity of forests in protected areas	(i) Mechanism for resolving political pressures on management of protected areas developed and functional (ii) At least 4,000 Km of boundary for critical forests under dispute re-opened (iii) The forest estate effectively protected against illegal activities (iv) Encroachers removed from at least 100,000 ha of FRs (v) A chain of custody for priority products and mechanism to track compliance to the laws from source to market place established. This includes labels and produce movement permits (vi) A voluntary compliance motivation scheme at national level established to reward those who report forest crime operational
	(d) Promote professionalism (codes of ethics, skills, professional standards)among forestry practitioners	(i) A legally established forestry professional body in place and functional (ii) Honorary Forest Officers and Authorized Forest Officers appointed as provided for in the NFTPA (iii) Law enforcement personnel at FMU level[1] trained in skills forest law enforcement skills (intelligence gathering and packaging, networking, negotiations and research)
	(e) Develop the capacity of CSOs and local communities to contribute to FLEG and hold government institutions accountable	(i) Forestry-related NGOs/CBOs identified, documented and empowered to participate in forestry resource management and development (ii) At least 7 National Annual Forestry

Programmes	Strategy	Target
		Congresses held with at least 2,000 participants in each congress
	(f) Strengthen collaborative forest management partnerships for improvement of the wellbeing of forest-edge communities	(i) At least 10 Village savings and loans associations (VSLAs) established in CFM areas annually
	(g) Increase collaboration and coordination between formal forestry institutions (including private forest owners associations) and law enforcement agencies for effective FLEG	(i) A formal coordination arrangements developed for law enforcement between Forestry institutions and law enforcement agencies
12. Forest financing and resource mobilization	(a) Mobilize conditional grants for forestry developments in local governments	(i) At least 50% of districts receiving conditional grants from central government for forestry development (ii) At least 70% of internally generated forestry revenues from local government ploughed back for forestry development
	(b) Incorporate the forest stocks and flows into the national accounting system	(i) Total economic values reflected in the Statistical Abstracts and the National Budgets
	(c) Operationize the Tree Fund provided for under the law to support tree growing initiatives	(i) An operational Tree Fund
	(d) Develop economic instruments (financial, taxes, green levies, etc) for funding forest management and PES	(i) Payment of biodiversity and ecosystem services, particularly carbon sequestration, water catchments protection developed (management thru the Tree Fund and REDD+ mechanisms) (ii) Economic valuation of at least two forests annually
	(e) Develop innovative and non-traditional enterprises (e.g. expanding landscape tourism, botanical gardens, butterfly farming, value addition, etc) to diversify incomes/revenue sources	(i) At least 10 enterprises developed to levels that produce for the market
	(f) Promote corporate social responsibility initiatives that support tree growing and natural forest management	(i) At least 20 private companies investing in CSR related to forestry
	(g) Mainstreaming tree planting in all public and private development programmes	(i) Public programmes for key ministries that consume forest products and services contain a

Programmes	Strategy	Target
	and projects	substantial tree growing element
	(h) Promote private-public Partnerships to enhance forest sector financing	(i) Government increases budget allocation to sector to about 10%
	(i) Mobilize long-term low-interest finance from pension funds, insurance and financial institutions for forest developers	(i) At least one pension/insurance scheme investing in forestry (ii) Insurance for forest investment /estate (iii) Forest loans from financial institutions
13. Forest certification	(a) Develop systems for independent verification of legal sources of marketable forest products	(i) A functioning system for independent verification of legal sources of forest products (chain of custody) in place
	(b) Establish and support a National Working Group under the auspices of the Forest Stewardship Council (FSC)	(i) FSC National Working Group in place and operational (ii) FSC National Initiative in place and functional with an office
	(c) Develop the national standards, criteria and indicators in accordance with FSC SFM principles and generic criteria & indicators	(i) FSC standards and criteria reviewed and domesticated
	(d) Publicize and develop markets for the forest certification initiative	(i) A vibrant internal market for certified forest products created
	(e) Manage selected natural forests and plantations for production according to sustainable forest management principles in a phased manner	(i) Forest certification undertaken in 5 major production natural forest reserves using the phased approach (ii) 4 timber plantation groups certified using the phased approach
	(f) Organize and encourage PFOs to produce for the markets that take products from forests managed under the certification scheme	(i) At least two natural forest PFO groups producing for certification markets
Incorporation of Gender Issues	(g) Prepare programmes that will specifically benefit rural women, youth, elderly and children	(i) At least one continuous forestry or related programme incorporated in key women's organisations in all districts e.g. tree growing, technologies for biomass energy processing & use (ii) At least one continuous forestry or related programme incorporated in key youth organisations in all districts e.g. tree growing on sub-county land, technologies for charcoal processing, etc
HIV/AIDS	(h) Prepare standard training materials for stakeholder education	(i) A forestry-AIDS training kit developed and translated into at least five of the major local languages

Programmes	Strategy	Target
	(i) Conduct studies regarding the palliative nature of herbal medicines	(i) An information kit on herbal medicines for HIV/AIDS prepared by the National Chemotherapeutics Organisation and translated into at least five of the major local languages
Environment management	(j) Conduct studies on specific functions of forestry in conservation of the environment	(i) comprehensive studies covering at least five major functions of forests in environment conservation
	(k) Promote EIAs for major forest operations (e.g. commercial plantations, timber harvesting, ecotourism, etc.)	(i) all new commercial plantations, timber harvesting licenses and ecotourism operations are covered by EIAs
Climate Change	(l) prepare and implement the REDD+ Strategy	(i) all the natural forests in the PFE and registered private & community forests managed under REDD+ requirements (ii) voluntary schemes for payment of ERs from natural forests and trees on farm expanded to cover the whole country
	(m) Scale up afforestation and reforestation projects in line with CDM arrangements	(i) All major new commercial timber plantations established under the CDM arrangements

10.3 Assumptions and risks

1. **The national land use policy will support the forest policy by guaranteeing forest ownership and stewardship.** Forestry is a long term investment destination and therefore, it requires certainty of long term forestland ownership to guarantee security of investment. This is especially so where registered or gazetted forestland is involved. This requires clauses in the land policy and law stating inviolate guarantees of forestlands.

2. **Bureaucracies at Universities and Technical Colleges will allow for flexible programmes that will offer tailor-made training courses for a variety of stakeholder needs.** Low levels of technology will require re-equipping with skills in order to re-orient stakeholders towards production on commercial scales. Therefore relevant short skills training curricula will be needed to meet especially the needs for independently verifiable sustainable forest management & chain-of-custody and processing of non-timber forest products

3. **Niche markets for products from independently verifiable SFM and chain-of-custody will continue to grow.** This is necessary to increase the competitiveness of Uganda's forest products (e.g. charcoal, bee products) and services (e.g. ecosystem services) on the domestic, regional and international markets. On the other hand, it will be difficult for Ugandan forestry products (especially from natural forests) to be accepted on the international market, or even by big development projects financed from ODA, if forest management and chains of custody are not independently verifiable.

4. **ICT infrastructure will be established upcountry where forests are being grown and where industries are located.** ICT solutions are necessary to improve communication and hence

transfer of data in a timely manner. Delivery of information at the right time, in the right format, can keep an enterprise a step ahead of others

5. **Financial institutions and pension funds will develop financing products to enable investors in primary forest production** (e.g. establishment of forest plantation, management of natural forests for timber) **to access low interest loans**. Forest management requires long term investment with the bulk of the returns coming after 15-25 years, or even more for the natural forests

6. **Roads leading to the high production forest locations will be maintained in a motorable condition even during the wet seasons.** This is especially so for the feeder roads passing through major plantation CFRs and natural forests of high ecotourism potential. This will attract private sector investment in the more remote areas where there are big chunks of land which are suitable for large scale timber plantations and terrains with potential for landscape ecotourism. Such areas are to be found in the Albertine Rift and the northern axis stretching from the Karamoja to West Nile Regions.

7. **The forest law enforcement agencies like police, the courts of law and the IGG, among others, will deal with corruption and forest crime firmly and expeditiously.** FLEG is crucial for maintaining foreign investment and ensuring that capital finance remains, and continues to increase in the sector. The struggle for FLEG starts within the institutions responsible for forest management and pans outwards to other players in the rest of society.

8. **The meteorology services will provide timely & accurate weather and meteorological information** to enable correct timing for planting, and fire protection, and harvesting. Millions of dollars invested in forest plantations can go up in smoke if the weather cannot be forecasted accurately and in a timely manner.

9. **Ministry of Public Service will accept to review the numbers of approved positions and fill them, especially in FSSD and LG Forestry Departments.** These institutions cannot deliver according to expectations of clients unless they are adequately staffed.

10. **No more land titles for other uses will be issued in PAs.** This includes gazetting of urban centres in PAs, and legalizing activities like polling centres. This is necessary to ensure a PFE that will cushion the country against the vagaries of primitive accumulation of wealth.

11. **Agricultural practices that optimise sustainable land management will be embraced by society.** This is necessary to reduce the rate of expansion of farmlands but increase agricultural production levels. Without this, reversing forest clearing will become very difficult.

Appendix 1: List of Documents Reviewed

Author	Year	Title
FAO Uganda Country Office	2010	The FAO Guidance, Intentions and commitment to climate change for Uganda (2010-2014)
Kaggwa, R; Hogan, R. and Hall, B (Editors).	2009 (a)	Environment & Natural Resource Series -Enhancing Forestry Contribution to Growth Employment and Prosperity)
Kaggwa, R; Hogan, R. and Hall, B (Editors).	2009 (b)	Environment & Natural Resource Series –Enhancing the Contribution of Weather, Climate and climate Change to Growth, Employment and Prosperity
Bush, G. S. Nampindo, C. Aguti and A. Plumptre	2004	The value of Uganda's forests: A livelihoods and ecosystems approach
Forest Department	2002	Forest Nature Conservation Master Plan
Global Mechanism,	2009	Financing Forest Management Investments from Domestic Private Sources – Uganda Study Report
Jagger, P.	2008	. Forest Incomes after Uganda's Forest Sector Reform - Are the Rural Poor Gaining?
Kamugisha- Ruhombe J	2010	The Challenges of Mobilising Forest Finance in Heavily Indebted Poor Country: Case Study of Uganda Unasylva 234/35, Vol. 61, 2010
Ministry of Agriculture, Animal Industries and Fisheries	2010	Development Strategy and Investment Plan for the Agricultural Sector
Ministry of Energy and Mineral Development	2002	The Energy Policy for Uganda
Ministry of energy and Mineral Development	2007	Annual Report for 2007
Ministry of finance, Planning and Economic Development	2009	National budget framework paper 2009/2010 – 2013/2014
Ministry of finance, Planning and Economic Development	2008	Background to the budget 2008/09 fiscal year
Ministry of Finance, Planning and Economic Development	2009	National Budget Framework Paper FY 2009/10 – FY 20013/2014
Ministry of Water and Environment	2010	Water and Environment sector performance report (2009/10)
Ministry of Water and Environment	2009	Water and Environment sector performance report (2008/09)
Ministry of Water and Environment	2007	Guidelines for Management of Private Natural Forests
Ministry of Water and Environment	2009	Water and Environment Sector Performance Report,
Ministry of Water, Lands and Environment	2002	The National Forest Plan
Ministry of Water, Lands and Environment	2002	National Forest Plan
Ministry of Water, Lands and Environment	2001	Uganda forestry policy
National Forest Authority	2005	Timber Plantation Investment Programme – A briefing Note
National Forestry Authority	2009	National biomass study (2009)???
National Forestry Authority	2008	Managing Central Forest Reserves for the people of Uganda: A strategic Action Plan for the period 2008/09 – 2012/13
National Forestry Authority	2005	Plantation Development Strategy

National Forestry Authority	2009	Start-up funding - Final Performance Report, 2003
National Forestry Authority	2009	Annual Report 2008/09
Republic of Uganda	2010	National Development Plan (2010/11 – 2014/15
Republic of Uganda	2003	National Forestry and Tree Planting Act
Republic of Uganda	2005	Acts Supplement No. 11, Act 21: The Constitution (Amendment) (No. 2) Act, 2005
Steve Nsita & Gaster Kiyingi (Consultants)	2010	Forest Governance Reforms in Uganda – Proceedings of the Workshop organized by the Ministry of Water and Environment, and the World Bank (Final draft Report submitted to the World Bank)
Steve Nsita (consultant)	2010	The Effectiveness of Collaborative Forest Management as a Means of Engaging Local Communities in Forest Conservation - Study Report on Lessons Learned From Uganda (Final draft Report submitted to the WWF Uganda Country Office, 2010)
Steve Nsita (consultant)	2010	Forest Partnerships and Benefit Sharing Arrangements in Uganda - A Synthesis of Four Case Studies (Final draft Report submitted to the World Bank)
Steve Nsita (consultant)		Current and potential use of ICTs in the forest sector governance in Uganda (Final draft Report submitted to the World Bank)
Uganda Bureau of Statistics	2009	2009 Statistical Abstract
Uganda Bureau of Statistics	2006	Uganda National household Survey, 2005/2006 – Report on the Socio-Economic Module
UNFCCC	1998	Kyoto Protocol to the United Nations Convention on Climate Change
UNFCCC	2007	Report of the Conference of the Parties on its thirteenth session, held in Bali from 3 to 15 December 2007 - Part Two: Action taken by the Conference of the Parties at its thirteenth session
United Nations Economic and Social Council	2007	Official Records, Supplement No. 52
World Health Organisation	2003	Fact Sheet on Traditional Medicine: http://www.who.int/mediacentre/factsheets/fs134/en/

Appendix 2 (a): List of Key Informants Interviewed

	Name	Designation	Organization
1	Joseph Sebastian	General Manager	Nile Plywood (U) LTD, Jinja
2	Kannan Bhaskar	Plantation Manager	Nile Plywood (U) LTD, Jinja
3	Nassuna Sarah	Industrial Operations Manager	Busoga Forestry Co. LTD
4	Prof. Gombya Sembajje	Senior Lecturer	Faculty of forestry & nature conservation, MUK
5	Prof. John Tabuti		Makerere institute of environment & natural resource
6	John Tumuhimbise	SNR Energy Officer,	MoEMD
7	Stephen Fred Okiror	Wildlife Officer,	MTTI
8	Chris Karugaba	Superintendent of prison, i/c Afforestation	Uganda Prisons
9	John Bugere	Project officer	Church of Uganda
10	Vasco Kura	Provincial Education Coordinator,	Church of Uganda
11	Alfred Kisembo		Uganda Wildlife Authority
12	Andrew Kitamirike		National Bureau of standard
14	Uma Agula Francis	Assistant Commissioner ,Secondary (General),	MOES
15	Muziribi Betty	Assistant Commissioner, Primary Education,	MOES
16	Zigiti Zeridah	Senior Economist/Desk Officer, Water & Environment Sector,	MFPED
17	J.J Nsoko	Head of Human Resource Management /Deputy ACP Manager;	Ministry of Local Government
18	Seth N. Mayinza	Director, Uganda Census of Agriculture,	Uganda Bureau of statistics
19	Dr, Peter Ndemere	Executive Secretary	The National Council of Science & Technology
20	John Tugumisirize	SSP	Police
21	Lubwama Joseph		Najja Timber Workshop, Kireka
22	Robert Nabanyumya	Chairperson	UTGA
23	Justine Mwanje Mutesasira		Private Forestry Practitioner
24	Ochom Paul	Nursery Manager,	Umoja Farmers Ltd
25	Njuki Benedict	Nursery Manager,	BOSNUM Wood Workshop
26	Kiyingi Gaster	National Programs Advisor	Tree Talk Plus
27	Kagolo Sizomu	President	Uganda Wood Farmers association (UWFA)
28	F.X. Mawanda	Assistant Commissioner I/C Farms	Uganda Prisons
29	Ambrose Kyaroki	President,	Uganda Forestry Association
30	Anguti Patrick	Forest Officer	Uganda Electricity Distribution Company Limited
31	Twesigye Bashir	Research officer	Advocates Coalition for Development and Environment (ACODE)
32	Nkabakyenga Geoffrey	Sole Proprietor	Private Tree Farmer, Forest Produce Dealer (Rukungiri)
33		Principal Land Officer (Geometrics/ Land Information),	Ministry of Lands, Housing and Urban development
34	Kasimbazi David	Senior Urban Officer	Ministry of Lands, Housing and Urban development

	Name	Designation	Organization
35	Ogaro Wilson	Principal Land Officer	Ministry of Lands, Housing and Urban development
36	J. Twinomugisha	SSP	Uganda Police Force
37	Wesinge Nathan	Head of Marketing	ERIMU Co. Ltd
38	Cornelius Kazoora	Consultant	Sustainable Development Centre
39	Christine Nantongo	Coordinator	Uganda Forestry Working Group
40	Kura Vasco		Church of Uganda
41	Asiimwe		Private Tree Grower
42	Andrua Hudson	Ag. Executive Director	NFA
43	Godfrey Acaye	Ag. Director, Natural Forests	NFA
44	Kamese	I/C REDD & Climatic Change	National Association of Professional Environmentalists (NAPE)
45	Dickson		Forestry and Environmental Development Network FEDN
46	Leo Twinomuhangi	Range Manager,	NFA
47	Simon Nampindo		Wildlife Conservation Society
48	No name		International organisation
49	No name		International organisation
50	No name		International organisation
51	Mr. David Duli	Country Director,	WWF/UCO
52	Mr. P. Jacovelli	Chief Technical Advisor	SPGS
53	Mr. L. Okwerede	Principal Water Quality Control Officer,	National Water & Sewerage Corp.
54	Mr. Sam Otuba	Assistant Comm. Planning	MWE
55	Mrs. R. Musoke	Commissioner	FSSD
56	Mr. Stephen Mugabi	Asst. Commissioner,	Environment Sector Support Department
57	Eng. S. Watenga	Senior Engineer	Directorate of Water Development
58	Dr. P. Apell	Field Programme Manager	Jane Goodall Inst.
59	Ms. Helle. Biseth	First Secretary,	Royal Norwegian Embassy
60	Mr. D. Oponya	Technical Advisor/Climate Change & Mitigation	GTZ
61	Ms. Lucy Iyango	Asst. Commissioner	Wetlands Department
62	Mr. Maikut. Chebet	Head	Climate Change Unit, MWE
63	Ms. B. Nakangu Bugembe	Head	IUCN Uganda Office
64	Dr. A. Neilage	Country Director	Wildlife Conservation Society
65	Mr. F. Ogwal	NRMS (B & R)	NEMA
66	Ms. Jalia Kobusinge	Operations Manager	EC Delegation
67	Ms. Edith K. Kasajja	Manager/Agriculture and Natural Resources	National Planning Authority
68	Ms. E. Kabesiime	Manager	CARE
69	Mr. Abubaker Wandera.	Coordinator	UNDP/GEF Small Grants Programme
70	No name (35 respondents)		

Appendix 2 (b): Participants in Regional Stakeholder Consultative Workshops

List of Participants in the Regional Consultative Workshop - Central
Held on 27th – 28th September 2010

No.	NAME	DISTRICT	DESGINATION
1.	Gateese Teopisita	Luwero	DEO
2.	Luzze Charles	Luwero	Planner
3.	Mujimbi Deogratious	Luwero	DFO
4.	Mulami Mukiibi T.S.	Luwero	Sec Production
5.	Kambedha Irene	Lyantonde	DFO
6.	Nayebale Fred	Lyantonde	Sec. for Prod.
7.	Ssekamatte John	Lyantonde	Environment
8.	Yiga Matovu Paul	Lyantonde	Planner
9.	Baraza Ben	Mubende	CDO
10.	Kakinda Matovu William	Mubende	D/Planner
11.	Katukore Blazio	Mubende	DFO
12.	Kinene Vicent	Mubende	Sen. Env. Officer
13.	Balimunsi Moses	Mukono	For Env. Officer
14.	Mujuni William	Mukono	DFO
15.	Njoola Charles	Mukono	Planner
16.	Anne Nakafero	Wakiso	D/Env.
17.	Nankya Harriet	Wakiso	DFO
18.	Ssenduli John	Wakiso	CDO
19.	Khaukha Stephen	CADMA Consult	
20.	C. D. Langoya	CADMA Consult	

List of Participants in the Regional Consultative Workshop - Western
Held on 27th – 28th September 2010

No.	NAME	DISTRICT	DESGINATION
1.	Mwebaze Charles	Bushenyi	D/Planner
2.	Perez R. Kakumu	Bushenyi	DFO
3.	Rev. Mugarura L.	Bushenyi	Sec / Production
4.	Bagambe John B.	Isingiro	SEO
5.	Besiga Stephen	Isingiro	District Planner
6.	Bwengye Emmanuel	Isingiro	DFO
7.	Mugarura Edward	Isingiro	DCDO
8.	C. Magezi	Kabale	For Planner
9.	Kyomuhangi Eddie	Kabale	SCDO – Gender
10.	Kyomukama Adios	Kabale	DFO
11.	Mugume Isaac	Kyenjojo	D/Planner
12.	Onzima L.P. B	Kyenjojo	DFO
13.	Twooli Yafesi F.	Kyenjojo	DCDO
14.	Bigabwa Julius	Kyenjonjo	Sen. Env. Officer
15.	Kayumbi William	Mbarara	DCDO
16.	Musingwire Jeconious	Mbarara	DNRO
17.	Tinkamanya Emmauel	Mbarara	SFTO
18.	Tusimireyo J.	Mbarara	D/Planner

List of Participants in the Regional Consultative Workshop - Eastern
Held on 15th – 16th November 2010

No.	NAME	DISTRICT	DESGINATION
1.	Titua Ouma	Busia	CDO
2.	Erienyu Johnson	Busia	DEO
3.	Ouma W. Anthony	Busia	DFO
4.	Wabwire Patrick	Busia	District Planner
5.	Wambi Nasser	Jinja	For DFO
6.	Isabirye Robert	Kamuli	DEO
7.	Isanga Joseph	Kamuli	DFO
8.	Banafamu Robert	Kamuli	Planner
9.	Madada David	Kamuli	CDO
10.	Mabuya George	Mbale	DFO
11.	Wanaga Charles	Mbale	Secretary for Production & Natural Resources
12.	Wakube Charles	Mbale	DEO
13.	Annet K. Magola	Mbale	For Planner
14.	Akello Stella	Soroti	For DCDO
15.	Opolot Francis	Soroti	DEO
16.	Adutu George	Soroti	DFO
17.	Wakwesa E	Soroti	Planner

List of Participants in the Regional Consultative Workshop - Northern
Held on 15th – 16th November 2010

No.	NAME	DISTRICT	DESGINATION
1.	Tollea Franco	Arua	CDO
2.	Ogwanga Cyprian	Arua	For Dist. Planner
3.	Andiandu Joackim	Arua	DEO
4.	Adiribo Edison	Arua	DFO
5.	Nsimiire William	Masindi	DEO
6.	Nekesa Victoria	Masindi	For DCDO
7.	Biryetega Simon	Masindi	DFO
8.	Mugisa M.M.	Masindi	For Dist. Planner
9.	Abal Peter	Kitgum	DAO
10.	Otim Alfred	Gulu	CDO
11.	Otim Chris N.	Gulu	District Planner
12.	Adong Vicky	Gulu	For DFO
13.	Anywar Martin	Kitgum	DFO

Appendix 2(c): Multi-Stakeholder Technical Committee Members

Name	Designation	Organization
1. **Mr. Onyango Gershom**	Director Environment Affairs	Ministry of Water and Environment
2. **Mrs. Musoke Rachel**	Commissioner	Forestry Sector Support Department
3. **Charles Byaruhanga**	Forest Officer	Forestry Sector Support Department
4. **Ms. Adata Margaret**	Assistant Commissioner	Forestry Sector Support Department
5. **Ms. Christine Nantongo**	Executive Director	Uganda Forestry Working Group
6. **Dr. Kaboggozza**	Senior Lecturer	Makerere University
7. **Dr. Wilson Kasolo**	Principal	Nyabyeya Forestry College
8. **Kabi Maxwell**		National Forestry Authority
9. **Mr. Robert Nabanyumya**	Executive Director	Uganda Timber Growers Association
10. **Dr. Epila**	Director	National Forestry Resources Research Institute
11. **Matyama Fred**	Assistant Commissioner	Ministry of Finance, Planning and Economic Development
12. **Dr. Peter Ngategize**	Director	Ministry of Finance, Planning and Economic Development
13. **Mr. Mutabwire**	Commissioner	Ministry of Local Governments
14. **Mr. Kagolo Sizomu Michael**	President	Private forest owner
15. **Mr. Muwaya Stphen**		Ministry of Agriculture, Animal Industry and Fisheries
16. **Richard Kapere**		Uganda Wildlife Authority

Appendix 2(d): Participants in National Stakeholder Consultative Workshop held on Friday 18th March 2011 (Fairway Hotel-Kampala)

S/ No	NAME	INSTITUTION	DESIGNATION	EMAIL	TELEPHONE
1.	**Hollie Manuel**	Uganda Carbon Bureau		holliemanuel@uganda carbon.com	0758518229
2.	**Thomas Otim**	WWF-UCO	CN	totem@wwfuganda.org	077248851….
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4.	**Nakigudede Irene B.**	UTGA.	Programs Manager	inakigudde@yahoo.com	078257891/ 078426
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7.	**Lawrence Lee**	FAO	Env-Management	lawrencelee@gmax.com	0787017581
8.	**Gaster Kiyingi**	Tree Talk	National Program Manager	gasterk@yahoo.com	0772448110
9.	**John Tabuti**	MUCAES	Professor	jtabuti@muinr.mak.ac.ug	0772960880
10.	**Racheal Musoke**	FSSD/DEA	Commissioner	rachealmusoke@yahoo.com	0772489308
11.	**Mwayafu David**	UCSD	Program Officer	mwayafu@ugandacoaltion.org.ug	0752521230
12.	**David K. Nkwanga**	Nature Palace Foundation	Director	naturepaldn@gmail.com	0772625963
13.	**Steve Nsita**	CADMA Consult	Consultant	steaveamoti@gmail.com	0772616759
14.	**Epila Otara**	NFoRRi	SPRO	piraotara@gmail.com	0782475013
15.	**CD. Langoya**	CADMA Consult	Team Leader	cadma.consult@gmail.com	0772605432
16.	**Ceaser Kimbugwe**	Environmental Alert	UFWG Coordinator	ckimbugwe@envalert.org	0712564542
17.	**Stephen Khauka**	CADMA	Consultant	stephenkauka@gmail.com	0772561…..
18.	**Lesya Vereheijen**	World Bank	Operations Analyst	LveRheijen@worldbank.org	
19.	**Diana Wabwire**	Nature Uganda	Research Coordinator	dianah.nalwanga@natureuganda.org	0772929626
20.	**Henry Mukasa**	NAADS- Core team	Coordinator FADS	hmukas2003@yahoo.com	077353906
21.	**Oluka Akileng**	MWE/FSSD	PFO	oluka-akialeng@yahoo.com	0772495070
22.	**Francis Ogwal**	NEMA	NRMS (B&R)	fogwal@nemaug.org	0772517045
23.	**Keith Bitomize**	ARPFOCA	C/Pervern	keithbitomize@yahoo.com	0772479569
24.	**Paul Mafabi**	WMD/MWE	Commissioner	Paufabi@yahoo.co.uk	0772503255
25.	**Paul Ochom**	Umoja/USUFOPS	Operations Manager	paulochop@gmail.com	0782529133
26.	**Margaret Mwebesa**	FSSD/MWE	ACF	magathieno@yahoo.com	0772470023
27.	**George Owoyesigire**	MTTI	SWO	gwoyesogire@yahoo.com	0773226841
28.	**Mucunguzi Percy**	MWE	Economist	percy2mu@gmail.com	0782283285
29.	**Nanjobe Umah**	MWE	S/Scientist	umanjobe@yahoo.com	0782901155
30.	**Kyaryoki Ambrose**	UFA	Forester	ambrosekyaryoki@gmail.com	0772496572
31.	**Edith Kabesiime**	CARE Uganda	Program Manager	kabesiime@careuganda.org	0759491189
32.	**Mpagire Stephen**	MWE/FSSD	SFO	mpangirestephen@yahoo.com	0772593287
33.	**Margaret Lwanga**	MOLG	ES	mlwanga@gmail.com	0772422947
34.	**Charles**	MWE/FSSD	SFO	Charles-	0772469162

	Byaruhanga			kbyaruhanga@yahoo.com	
35.	**Sophie Kutegeka**	IUCN Uganda	Program Officer	sophiekutegeka@iucn.org	0772610061
36.	**Mark Owor**	New Vision	Photojournalist	mower@newvision.co.ug	0752813720
37.	**Edward Mupada**	Havilla company Ltd	Director	Edward.mupada@gmail.com	0772435347
38.	**Levand Turyomu**	MWE/FIEFOC	M&E S	turyomurugyendo@yahoo.co.uk	077276520…
39	**Katwesigye Issa**	MWE	FO	Isa20781@yahoo.com	0782432048
40.	**Kaganzi Emanuel**	MLHUD	SPP	kagaemma@yahoo.co	0772603521
41.	**Michael Ahimbisibwe**	MEMD	SEO	mahimbisibwe@energy.go.ug	078205929..
42.	**Mugabi S.D**	MWE	Assistant Commissioner	mugabisd@gmail.com	078205929
43.	**Alastair Mc Neilage**	WCS	Country Director	amcneidage@wcs.org	0772709754
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45.	**Zalibwegirire Julius**	MLHUD	SAS	zarijulius@mld.go.ug	0782766274
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47.	**Walakira Paul**	UNBS	Standards Officer	walakirap@yahoo.com	077237159
48.	**Paul Buyerah Musamali**	NFA	Director Corporate Affairs	paulm@nfa.org.ug/paulbuyera@yahoo.co.uk	07724666569
49.	**Robert Nabanyuya**				0772435355
50.	**Henry Sekanjako**	New Vision	Reporter	hsekanjako@newvision	0782717329
51.	**Mugabe Motram**	CADMA		mmotram@yahoo.com	0782717329
52.	**Patrick Byakagaba**	Faculty of Forestry MUK	Assistant Lecturer	Byaks2001@yahoo.com	0783563709
53.	**Gershom Onyango**	MWE	D/DEA	ggonyango@yahoo.co.uk	0772491807
54.	**Magumba Sarah**	MWE	Trainee	mukisarah@yahoo.co.uk	0772904530
55.	**Nakamoga Hanifah**	MWE	Trainee	hanienaks@yahoo.com	078299016
56.	**Bazira Henry**	Water Governance Institute	Executive Director	info@watergovinst.org	0752859475
57.	**Ronald Kagwa**	NEMA	Environment Economist	rkaggwa@nemaug.org	0772461828
58.	**Maria F. Nabukenya**	MWE	Administration Secretary	fieriam@yahoo.com	0772888089
59	**Bob Kazungu**	MWE/ FSSD	FO	Bob.kazungu@mwe.go.ug	0782712196
60.	**Michael Mbogga**	Forestry-Makerere	Lecturer	mboga@forest.mak.ac.ug	0772483723

Appendix 2(e): Participants in National Stakeholder Consultative Workshop held (Group discussion)

Group 1 reviewed the following programs:

- Commercial Forest plantations
- Tree Growing on Farm
- Urban Forestry
- Tree seed and Planting Materials

Members

1. Bob Kazungu
2. Nakigudde Irene Barbra
3. Lawrence Lee
4. Kyaryoki Ambrose
5. Ochom Paul
6. Kagazi Emmanuel
7. Zaribwegire Julius
8. Hanifah Nakamoga
9. Maria F. Nabukenya

Group 2 reviewed the following programs:

- Restoration and Conservation of Natural forest
- Forest Products Processing and value Addition.

Group Members

1. David K. Nkwanga
2. Keith Bitamazire
3. Sophie Kutegeka
4. Katwesigye Issa
5. Dianah Wabwire
6. Nanjobi Umah
7. Michael Ahimbisibwe
8. Walakira Paul
9. Alastair MacNeilage
10. Hollie mauel
11. Kagwa Ronald
12. Michael Mbogga

Group 3 reviewed the following programs:

- Information and advisory Services
- Forestry Education and Training
- Forestry Research

Members

1. Henry Mukasa
2. Oluka Akileng
3. Epila Otara
4. Charles Byaruhanga
5. Francis Ogwal

6. Adrine Kirabo
7. Robert Nabanyumya
8. Henry Sekanjako
9. Mugabe Motran
10. Gershom Onyango
11. Magumba Sarah
12. Henry Bazira

Group 4 reviewed the following programs:

- Institutional development and Coordination
- Law Enforcement and Governance

Members

1. Ceasar Kimbugwe
2. Stephen Mpangire
3. Paul Mafabi
4. David walugembe
5. Mwayafu David
6. Edith Kabesiime
7. Mugabi Stephen David
8. George Owoyesigire
9. Lesya Veeheijen
10. Aribo Lawrence
11. Recheal Musoke

Group 5 reviewed the following programs:

- Forest Financing
- Forest Certification

Members

1. Asiimwe Martin
2. Mucunguzi Percy
3. Patrick Byakagaba
4. Gaster Kiyingi
5. Margeret Mwebesa
6. Bermarol Cabbe
7. Thomas Otim
8. John Tabuti
9. Margaret Lwanga
10. Lavand Turyomurugyendo
11. Paul Buyera Musamali

Workshop Facilitators;

1. Langoya Council Dickson
2. Steve Nsita
3. Stephen Khaukha
4. Mupada Edward