



Government of the Republic of Zambia

**MINISTRY OF TOURISM, ENVIRONMENT AND
NATURAL RESOURCES**



NATIONAL FORESTRY POLICY

(DRAFT)

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FOREWORD

The National Forestry Policy aligns the forestry sector to current trends in forestry and to the necessity of meeting the national strategies as enshrined in the National Policy on Environment, the Millennium Development Goals (MGDs) and other global conventions and treaties to which Zambia is a signatory. The increasing demands on forest resources of Zambia, the need to address emerging issues such as climate change, bio-energy development, prioritization of agriculture, eco-tourism and environment as engines for Zambia's development and the need for devolution of management systems have necessitated the review of the National Forestry Policy of 1998.

This National Forestry Policy is a review of the National Forestry Policy of 1998 which was based on the Zambia Forestry Action Plan (ZFAP) and stakeholder views. The major objective of ZFAP was to develop a national strategic framework for the forestry sector of Zambia. Under ZFAP, a number of thematic studies in the forestry sector were undertaken resulting in a number of successes but with a few gaps. Even though the National Forestry Policy of 1998 provided initiatives for sustainable forest management, the current Policy has addressed new challenges and other emerging issues including strategies related to the contribution of the forestry sector to poverty reduction and Zambia's national economy based on projects that anchored in the national sustainable development criteria, and carbon forests and trade. Forests, woodlands and trees are some of the nation's most extensive natural heritage resources which require judicious management. They are renewable assets whose continued availability depends on our actions. In deriving benefits from these resources, it is incumbent upon us to ensure that biological diversity, soil and water conservation are not compromised.

This policy was developed through a comprehensive review of the National Forestry Policy of 1998 which was enriched by a country wide consultative process. The policy is underpinned by principles of devolution, empowerment, equity and justice and, community and private sector participation. A major aim of this Policy is therefore to re-direct and vigorously motivate responsible forestry management and feasible stakeholder interventions in forestry development for the good of Zambia.

In order to meet the vision and mission of the Ministry of Tourism, Environment and Natural Resources, everyone's task is to turn the forestry sector into a dynamic and vibrant economic machine whose value is appreciated by all and whose sustainability is a concern of everyone. In the pursuit of realizing and appreciating the value and sustainability of forest resources, it must be borne in the national psyche that our livelihoods and the integrity of our ecosystem hinge on how well we manage forests. This can be by maximizing actions that reduce deforestation, degradation and the emission of greenhouse gases. For this to be achieved, it is of utmost importance that the strategies embodied in this policy are implemented meticulously as livelihoods and ecosystem integrity may depend on these actions. We owe it to posterity not only to conserve our forests but to improve upon them as well.

Catherine Namugala, MP
MINISTER
MINISTRY OF TOURISM, ENVIRONMENT AND NATURAL RESOURCES

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The development of the National Forestry Policy was achieved through a broad-based consultative process involving key stakeholders in all the provinces of Zambia. We wish to thank first our cooperating partners who provided financial support for the inception workshop and policy review process. Thanks are also due to government departments for enriching this policy. Special recognition is accorded to the Planning and Information Department who provided the necessary guidelines based on Cabinet recommendations for policy reviews. Stakeholders and members of the Forestry Department contributed significantly to the formulations of the principles, objectives and measures contained in the National Forestry Policy document.

Without the contribution various stakeholders who included traditional leaders, local communities, several government departments and cooperating partners, this Policy could not have received the necessary critique, which eventually enriched its content. Finally, many thanks are also directed to all institutions and individuals who contributed to the formulation of the National Forestry Policy.

Teddy J.Kasonso

Permanent Secretary
MINISTRY OF TOURISM, ENVIRONMENT AND NATURAL RESOURCES

THE MISSION, GOAL AND OBJECTIVES

The Strategic Planning Workshop developed the following mission, goal, and objectives for the ministry:

1. MISSION

To provide an environmental policy framework, monitor, evaluate and co-ordinate its implementation, to ensure protection of the environment and sustainable development, management and utilisation of natural resources for the benefit of the present and future generations.

2. GOAL

To formulate appropriate policies on the protection of the environment, management and development of natural resources and ensure their efficient and effective delivery and implementation by the year 2000.

3. OBJECTIVE

The objectives are regrouped according to their functional areas as follows:

A. Research, Planning and Management Information System:

- i. To review and formulate policies on environmental protection and conservation of natural resources;
- ii. To review existing environment and natural resources legislation.
- iii. To provide guidelines, monitor, and co-ordinate environmental impact assessments;
- iv. To review and update guidelines on the establishment and operations of natural resources committees at provincial and district levels;
- v. To carry out inventories on natural resources;
- vi. To establish an environmental resources information management system;
- vii. To undertake and promote environmental and natural resources research;

- viii. To develop environment and natural resources management and utilization of natural resources;
- ix. To monitor the state of the environment and utilization of natural resources;
- x. To co-ordinate activities related to the Management of the environment and natural resources by other organizations;
- xi. To carry out biological studies for conservation and improvement of biological diversity;
- xii. and to set environmental protection standards and regulations and monitor their compliance.

B. Natural Resources Management i.e. Restoration, Improvements and Extension Services:

- i. To set aside areas and provide guidelines and supervision for their management;
- ii. To encourage community participation in the management of environment and natural resources;
- iii. To raise the level of awareness amongst the people of Zambia on the values and sustainable management of natural resources;
- iv. To restore environmental quality in degraded areas;
- v. To ensure the provision of natural resources products in sufficient quantities;
- vi. To establish forest plantations in wood deficit areas;
- vii. To facilitate the establishment of natural resources based industries and regulate their operations and
- viii. To provide extension services for the management and development of natural resources.

C. Human Resources Development:

- i. To promote human resources development in environmental and natural resources management;
- ii. To develop human resources for environmental and natural resources management and
- iii. To review and develop curricula for environmental and natural resources education.

The above Mission, Goal and Objectives were made under the assumption that the Ministry will take charge of all natural resources which include forestry, land management, wildlife, water and fisheries conservation. However, apart from forestry and wildlife, other natural resources are distributed in other government ministries dealing respectively with agriculture, energy, fisheries, lands and water development. The all-embracing term of 'natural resources' is therefore, a misnomer for the Ministry of Tourism, Environment and Natural Resources. Nonetheless, the Ministry will remain responsible for formulating and monitoring an umbrella policy that covers all environmental and natural resources issues together with overall sector specific policies for forestry, wildlife and environmental protection and pollution control.

WORKING DEFINITIONS

Biodiversity	The total variety of all living organisms, including their genetic constituents, inter-relationships and habitats together with ecosystems and landscapes of which they are a part.
Civil society	The arena of uncoerced collective action around shared interests, purposes and values, embracing a diversity of spaces, actors and institutional forms, varying in their degree of formality, autonomy and power. These include organisations such as registered charities, development non-governmental organisations, community groups, women's organisations, faith-based organisations, professional associations, trades unions, self-help groups, social movements, business associations, coalitions and advocacy groups.
Climate change	A change of climate which is attributed directly or indirectly to human activity that alters the composition of the global atmosphere and which is in addition to natural climate variability observed over comparable time periods.
Conservation	The wise use and management of nature and natural resources for their inherent value and for the benefit of society, bearing in mind that future generations have as much a right to these resources as our own.
Deforestation	The direct human induced conversion of forest land to non-forest land
Ecosystem	A complex of living communities of organisms and their non-living environment interacting as an autonomously self-regulating system.
Ecosystem Services	End-products or components of nature directly enjoyed, consumed or used to yield human wellbeing.
Emissions	The release of greenhouse gases and/or their precursors into the atmosphere over a specified area and period of time.
Environment	The ecosystem of which man constitutes a component thereof including cultural and man-made features sometimes defined as the complex set of physical, geographic, biological, social, cultural and political conditions that surround an individual or organism and that ultimately determines its form and nature of its survival.
Forest Degradation	Changes within the forest which negatively affect the structure or function of the stand or site, and thereby lower its capacity to supply products and/or services.

Forest	Land with tree crown cover (or equivalent stocking level) of more than 10% and area of more than 0.5 ha. Trees should be able to reach a minimum height of 5 m at maturity <i>in situ</i> . Young stands that have not yet but are expected to reach a crown density of 10 percent and tree height of 5 m are included under forest, as are temporarily unstocked areas. The term includes forests used for purposes of production, protection, multiple-use or conservation (i.e. forest in national parks, nature reserves and other protected areas), as well as forest stands on agricultural lands (e.g. windbreaks and shelterbelts of trees with a width of more than 20 m).
Forest Ecosystem	A dynamic complex of plant, animal and micro-organism communities and their abiotic environment interacting as a functional unit, where trees are a key component of the system. Humans, with their cultural, economic and environmental needs are an integral part of many forest ecosystems.
Forestry Management	A system of practices for stewardship and use of forest land aimed at fulfilling relevant ecological (including biological diversity), economic and social functions of the forest in a sustainable manner.
Forest Plantation	A forest established by planting or/and seeding in the process of afforestation or reforestation. It consists of introduced species or, in some cases, indigenous species.
Forestry Sector	The sector is defined on the basis of the ILO' s International Standard Classification of all economic activities (ISIC) and is taken to include activities that are dependent on the production of wood fibre (i.e. forests and related services, production of industrial round wood (logging); wood fuel and charcoal; sawn wood and wood based panels; pulp and paper; and wooden furniture; commercial production and processing of nonwood forest products and subsistence use of forest products).
Greenhouse gas	Those gaseous constituents of the atmosphere, both natural and anthropogenic, that absorb and re-emit infrared radiation
Gross Domestic Product	The total value of goods and services produced domestically by a nation during a year.
Local Knowledge	Collection of facts and relates to the entire system of concepts, beliefs and perceptions that people hold about the world around them. This includes the way people observe and measure their surroundings, how they solve problems and validate new information. It includes the processes whereby knowledge is generated, stored, applied and transmitted to others.
Joint Forest Management	A forest management system that involves the active participation of local communities in the protection, management and utilisation of forest resources.
Non-wood Forest Product	Includes all goods of biological origin, as well as services, derived from a forest or any land under similar use, and excludes wood in all its forms.
Natural Forest	A forest composed of indigenous trees and not classified as forest plantation.
Protection	The prevention of harm to organisms and the environment usually with tangible intervention and active management.

Sink	Any process, activity or mechanism which removes a greenhouse gas, an aerosol or a precursor of a greenhouse gas from the atmosphere
Sustainable Development	Development that meets the needs and aspirations of the present generation without causing deterioration and without compromising the ability to meet the needs of future generations.
Traditional leader	A local ruler of the clan or tribe who assumes leadership by descent.
Utilization of natural resources	Consumptive and non-consumptive exploitation or use of natural resource products or ecosystem services
Value added	This is a measure of the contribution to Gross Domestic Product (GDP) by an individual producer, industry or sector

ABBREVIATIONS AND ACRONYMS

C & I	Criteria and Indicators
CC	Climate change
CBO	Community Based Organisation
CBD	Convention on Biological Diversity
CITES	Convention on International Trade in Endangered Species of Wild flora and fauna
EIA	Environmental Impact Assessment
GDP	Gross Domestic Product
GHG	Greenhouse gas
ILO	International Labour Organisation of the United Nations
ILUA	Integrated Land Use Assessment
ISIC	International Standard Classification of all economic activities
JFM	Joint Forest Management
MP	Member of Parliament
MTENR	Ministry of Tourism, Environment and Natural Resources
MDGs	Millennium Development Goals
NFP	National Forestry Programme
NGO	Non-Governmental Organisation
NWFPs	Non-wood Forest Products
PFA	Protected Forest Area
PPP	Public Private Partnership
REDD	Reduced emissions from deforestation and degradation
SADC	Southern Africa Development Community
UN	United Nations
UNFCCC	United Nations Framework Convention on Climate Change
ZFAP	Zambia Forestry Action Plan

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CHAPTER 1

1.0 PREAMBLE

Forests are one of the most important natural resources of Zambia, covering sixty six percent of the total land area of the country though most of it is degraded. The forests play vital roles in people's livelihoods as major sources of timber, traditional medicine, wood fuel, food and building materials. Furthermore, forests play major roles in both carbon and hydrological cycles, are key factors in watershed and soil conservation, and are important for other landscape factors (e.g. soil erosion). However, forest resources are under pressure from the effects of several factors including deforestation, encroachment, uncontrolled bush fires, agricultural expansion and degradation. Forest degradation is primarily as a result of inappropriate management regimes and policies, and unsustainable harvesting systems. Against this background it has therefore become necessary that Zambia adopts a National Forestry Policy which aims at enhancing sustainable management of the country's forest resources and simultaneously meets the growing local needs for fuel wood, fodder, timber and non-wood forest products (NWFPs). This National Forestry Policy encourages the Joint Forest Management (JFM) system which anchored on the active participation of local communities in the management and utilization of forest resources at all levels of decision making, implementation, monitoring and evaluation.

1.1 GUIDING PRINCIPLES

Inappropriate policies, institutional arrangements and poor management effectiveness have led to the current poor status of the forestry sector. The objectives of the forestry sector cannot be realized using strategies which have guided forestry management and development over the past several decades. In order to meet these objectives, future strategies need to be guided by a new set of guiding principles. Hence, this forestry policy is based on the following guiding principles:

- i. Deforestation is a major factor in soil erosion, siltation of lakes, rivers, dams and other water bodies, loss of biodiversity and climate change.
- ii. The functional role of forests in carbon sequestration should be enhanced

- iii. The involvement of the private sector, civil society and local communities in forestry is critical to improved management, conservation and sustainable utilization.
- iv. Promotion of private investments in forestry such as in non-wood forests products, carbon forests, farm forests, plantation forestry and homestead forestry should be encouraged.
- v. Community-based participation in the management of protected forest areas and forests on customary lands shall be promoted.
- vi. Local communities that participate in the management of indigenous forest resources shall receive financial and other benefits from their sustainable utilization.
- vii. Inventorying and monitoring should be an integral part of sustainable forestry management.
- viii. Sustainable forest resource management and control of deforestation should best be enhanced on the basis of appropriate research, forestry development and extension.
- ix. Appropriate subsidiary legislation and regulations at the district level are essential to effective implementation of forest policy.
- x. The capacity of all stakeholders in sustainable forest resources management and utilization should be developed.

1.1.1 Sustainable Forest Resources Management

Zambia's abundant forest resources are threatened due to unsustainable harvesting practices and competition for forest land for agriculture, settlements, mining, and other land uses. In order to manage forest resources for present and future socio-economic and ecosystem needs, there is therefore a need for sustainable forest management that takes into account various socio-economic and ecosystem requirements. Sustainable forest management should have as its basis criteria and indicators upon which its performance hinges. This is paramount in the country's quest to ensure that progressive improvements in the national socio-economic fabric embraces sustainable development that aims at meeting the objectives of the Zambian society that are anchored on processes and outcomes that are equitable, economically and socially viable, and ecologically sound.

1.1.2 Forests and Climate Change

Forests play a critical role in mitigating climate change (CC) impacts. The United Nations has placed forests at the core of mitigating climate change through various ecosystem functions that forests and trees play. By increasing forest cover, mainly achieved by increasing the above and below ground forest biomass, there is a high likelihood of improving the climate change mitigation potential from forests through increased carbon sequestration. This can be achieved by promoting the establishment of plantation forests and improving the management of degraded forest land to encourage the regeneration of degraded areas thereby increasing the amount of carbon stocks stored in tree biomass.

1.1.3 Capacity Development

Sustainable management of forest resources can be achieved only through active participation of all stakeholders. To ensure effective forest resources management there is need to build capacity at all levels. Capacity development should include education and training in sustainable forest management at national and local community levels focusing on participatory forestry and forest ecosystem management methods, policy and planning, monitoring and evaluation and, research and extension services.

1.1.4 Participatory Approach

The strategies for the National Forestry Policy encourages partnerships between state agencies, local communities and individuals in order to resolve natural resource conflicts through dialogue among key stakeholders and to enhance ownership, governance and equitable benefit sharing arising from the sustainable management of forest resources. The participatory approach will further be achieved through cost and benefit sharing among stakeholders and the assistance and collaborative work of civil society. Trans-boundary forest resources management and related conflicts will be handled through existing bilateral and regional mechanisms.

The approach will ensure that the integrity of ecosystems and ecosystem functions that overlap state frontiers are enhanced.

1.1.5 Private Sector Forestry Development

Most commercial activities in forestry and forest industries development are mainly handled by the private sector. However, government will create an enabling environment for private sector participation in forestry and forest industries development. Potential areas of intervention by the private sector include establishment of carbon forests and plantations of indigenous and exotic species, management and utilization of natural forest resources, harvesting and marketing of forest products, forest industries and small-scale enterprises development, and the development of sustainable forest management systems. This policy provides clarity regarding the determination of stakeholders' rights, obligations and benefits on trees, forests and forest-associated products and services, as well as affording an effective incentive framework for rationalizing the forest products, and economic services pricing mechanism that will drive economically viable private sector investment and development.

1.1.6. Gender Mainstreaming and Persons with Special Needs

The contribution women, the youth and person with special needs to forestry sector management and development is critical for sustainable forest management. Gender analysis makes it possible to understand existing contributions made by women, men, the youth and persons with special needs in forest management. Women have primary responsibilities for food production and a major influence on natural resource products associated with forests particularly for their collection, processing and marketing for the benefit of the household. Presently, there are only a few women in the whole forestry sector including in the Forestry Department that are in professional positions. Gender equity in all aspects of forestry is a fundamental principle to achieve sustainable management and utilization of forest resources. The policy provides a framework that will guide gender mainstreaming in all facets of forestry management and intends to promote full participation by women.

1.1.7 Sector Integration

The measures identified in this policy need to be implemented in order to facilitate co-ordination among stakeholders through strengthened institutional collaborative arrangements at all levels.

This calls for the development, promotion and implementation of holistic strategies at the forestry sector and subsector levels that integrate conservation, development and management of forest resources with mining and human settlements development, crop and livestock production, wildlife management, energy and water resources development and management.

1.2 MISSION AND OBJECTIVES

1.2.1 Mission of the Forestry Sector

The mission statement of the forestry sector is to ensure a sustainable flow of wood and non-wood forest products and ecosystem services while at the same time ensuring the protection and maintenance of biodiversity for the benefit of the present and future generations through the active participation of all stake holders.

1.2.2 Goals

In order to operationalise the mission statement, the following goals have been set for the Forestry Department:

- i. To put in place effective forest management systems and operating structures.
- ii. To formulate and implement appropriate forestry policies (and regulations), and programs for sustainable management and utilization of forest resources
- iii. To promote sustainable, participatory and cross sectoral management and utilization of forests (products and services) such that all stakeholders, women, men, the youth and persons with special needs take active and sustained interest towards effective conservation, production and management.
- iv. To establish incentives and equitable benefit sharing mechanisms for all stakeholders participating in responsible forest resources management.

1.2.3 Overall Objective

The overall objective of the forestry sector is to manage the nation's forest resources in a sustainable manner to facilitate retention of their ecological integrity and maximize benefits to the nation, especially forest dependent communities.

CHAPTER 2

2.0. INTRODUCTION AND BACKGROUND

2.1 INTRODUCTION

The forestry sector faces a number of internal and external challenges at the biophysical and systems levels. The major internal challenges are the increasing deforestation and degradation of forest resources arising from a growing population, poverty and increasing demands placed on the forest resources by the increase in the demand of commodities; institutional set up and a poor legal frame work. The contribution of the forestry sector to poverty alleviation and the national economy also remains largely unknown even though some effort has been made to estimate this. Externally the forestry sector faces challenges of meeting international obligations such as domestication of the MDGs, adaptation to climate change and compliance to several agreements on environment to which Zambia is a signatory.

The National Forestry Policy is designed to address such daunting challenges and is comprehensive in content and takes a holistic approach to sustainable forest management. It is expected that this policy will transform the forestry sector into a proactive economic sector that will sustain itself.

2.2 BACKGROUND

Zambia had an extensive forest resource base until the attainment of political independence in 1964 and shortly afterwards. However, over the last four decades, the forest ecosystem has been impoverished largely due to population increase, economic decline, the escalating rate of deforestation and degradation, and inadequate policies and legislation.

Although, forests cover 66.4 percent of Zambia's total land area with another 8 percent being covered by other wooded land types, evidence of continuing forest destruction leading to soil erosion, loss of biodiversity, dwindling water and agricultural productivity, environmental degradation and their negative impacts on the micro-climate, food security, national energy supply and social welfare are well acknowledged. There is now a compelling need to institute appropriate measures not only to firmly re-invigorate the integrity of the forest estate but also to provide a viable framework for sustainable forest-based livelihoods, attract investments, create responsive corporate/public enterprises, redefine forest resources ownership and governance, and marshal meaningful commitments from a wide range of stakeholders for tree growing and protection and, for the sustainable utilization of forest products and services.

The various studies that have been commissioned in the past and a huge amount of data assembled under the Zambia Forestry Action Plan (ZFAP) and the National Forestry Programme facility have brought into sharp focus how the existing National Forestry Policy has affected the forest sector's role in the national economy. For a long time now, forestry production has been pursued solely as a government enterprise and has thereby been greatly disadvantaged from lack of competition. The Forestry Department has for a long time concentrated on wood production and its by-products while ecosystem services and other forest products were completely ignored. Moreover, the Forestry Department's capacity for policy implementation has, over the years, been limited and therefore rendered ineffective. Thus, the potential contribution of the forest estate to the national agenda is neither fully assessed nor exploited in the present circumstances. A major aim of this policy is therefore, to re-direct and vigorously motivate feasible and acceptable public and other stakeholder interventions in forestry development for the good of Zambia.

2.2.1 Existing National Forestry Policy 1998

The existing National Forestry Policy in its form and content has failed to provide an environment conducive for sustainable forestry development. At its inception in 1998, the Policy instituted the Forestry Commission as the sole actor in the forestry sector. It provided for explicit and implicit powers to the Commission as the largest and sole forest estate agent and management unit in the country.

The Commission, had it been established, could have enjoyed unchallenged monopoly to grow trees, determine where and when to harvest forest produce and fix and revise prices of forest goods and services. Additionally, the Policy did not stipulate benefit sharing guidelines for stakeholders involved in forest management. Even though the Policy has been cognisant of the important roles of local communities and gender issues, it has not facilitated a framework under which local community interests and needs are taken into account in forest management systems. On the other hand, the political and socioeconomic environment has been such that continued forest clearing for agricultural production and mining development are accepted as a better form of development than conservation and management of forest ecosystems. Over the last decades, these problems have been compounded by the sustained increasing high demand for wood fuel by the population which has in turn propelled a flourishing charcoal industry to the detriment of valuable forests and woodlands.

Nevertheless, the existing National Forestry Policy made appreciable gains for the country. It provided for the constitution of a sizeable forest estate which offers invaluable protection to soil, agriculture, headwaters and catchment areas and provides a habitat for other biological resources, critical services to environmental flows, mining and raw materials to manufacturing as well as tangible commodities for commerce. Yet most of the past Policy measures have not been implemented owing partly to growing competition from other social-economic sectors and partly due to outdated legal and institutional provisions.

The major tenet of the existing policy has been its centralist approach. For instance, it maintained the pre-1998 imposed determination of areas for forest reservation which was not borne out of consensus with other stakeholders nor determined classifications on the basis of the conservation status and significance of each forest reserve. Severe shortages of development resources have further prevented the forest authority from "reaching out" to local communities. This greatly eroded the possibility of a common forestry goal between the Forestry Department on the one hand, and the citizenry on the other. Evidently, there is need to launch a new Policy built upon solid and with dynamic elements stakeholders to effectively participate so that appropriate and timely interventions are enforced to ensure sustainable forestry management and development.

2.2.2 The Forest Resource Base

Forests cover 66.4 percent of Zambia's total land area with another 8 percent being covered by other wooded land types which translates into approximately 49.97 and 6.1 million hectares respectively. In addition, an estimated 9.9 percent of the total land area is gazetted as forest reserves. Out of the total area classified as forest reserves, 44 percent is set aside for production, 30 percent for both protection and production, and the remaining 26 percent is for protection only. The whole estate occurs on state, trust and reserve lands.

It is unfortunate that not a single comprehensive forest inventory has been undertaken in the last three decades. An exercise carried out in the period 1984 to 1986 covered only a few locations. The Integrated Land Use Assessments (ILUA) undertaken from 2005 to 2008 revealed that 63 percent of forest land is relatively undisturbed or slightly disturbed, 26 percent moderately disturbed and 5.6 percent of forest is considerably disturbed. The total wood volume for the country's forests stands at 2,940.7 million cubic meters with 39.1 cubic meters as the tree volume per hectare. The commercial volume per hectare is estimated at 4.9 cubic meters. Estimates by ILUA have shown that the deforestation rate is 350,000 hectares per annum which is attributable primarily to agriculture expansion into the forested land. Permanent land use changes, driven by low crop productivity in crop lands under subsistence agriculture, and a combination of factors have therefore been the major cause of deforestation.

2.2.3 Consumption of Forest Products and Services

The major consumers of forest resources are households mostly in rural areas and the industrial sector. About 88 percent of households depend on forests to meet their basic energy requirements and the need for other livelihood components. Wood fuel supply presents a rather intractable syndrome. While the overall demand for the commodity is increasing exponentially there are, however, severe local shortages in several locations. Therefore, its harmful effects to the environment and well being of the citizenry due to regular cuttings of trees for firewood and charcoal burning are evident. Forests provide carbon sequestration services that contribute to life supporting systems provided by the natural ecosystem. The ecosystem support services, which have been negatively affected resulting in global climate change, benefit every Zambian.

In the short and medium term, the problem can be addressed through participatory practices such as agroforestry and, community based forestry and development of energy efficient stoves.

2.2.4 Contribution of Forestry to the National Economy and the Environment

Generally, forests have a dual benefit to the economy through direct and indirect contribution even though the forest sector's contribution to the national economy is grossly under-reported. The real value of natural forests is unknown and neither has any effort been made to quantify the protective value of forests to catchment areas, water bodies, soil, agriculture, roads, among others. Moreover, there are other major contributions such as those made by women and other groups through trading in NWFPs which have not been recognized. NWFPs are estimated to act as a major contributor to food security and as a safety net in many poor households particularly those in forest-based communities. Apart from its contribution in terms of food, forests are also a major source of medicinal plants that derive from numerous wild plants used by rural, peri-urban and urban communities to cure numerous illnesses. Forests sequester carbon allowing for a relatively clean environment in which to carry out economic and development activities.

The NFP has indicated that the forestry sector contribution to the national economy is primarily through employment creation for an estimated 1.1 million Zambians and provision of about US\$421 million annual revenue - an estimated 5.2 percent projected contribution to the national gross domestic product (GDP). The Central Statistics Office was involved in the developing of the forestry sector data collection and processing guidelines and produced preliminary results of the official contribution of the forestry to GDP of 6.3 percent at constant 1994 prices making the forestry sector the highest contributor to GDP in the ISIC section A (Agriculture, Forestry and Fishing). Current understanding provides that forest services such as carbon sequestration, that can be quantified and traded across national frontiers, is a major contributor to the economy through its service of providing an atmosphere that has less carbon for human life to flourish. Local communities can also derive direct economic benefits from carbon trading. One of the reasons why the forestry sector contribution to the national economy has not been well documented is its categorization together under the agriculture and fisheries sector resulting in the apparent obscurity of the sector.

Notwithstanding this fact, the forestry sector has great potential for employment creation, raw material for downstream production of various products from sawmills, pulp and paper, sustainable supply of wood fuel and carbon sequestration and trade. Wood and wood products exports have also been significant. Forestry also plays a crucial role in supporting rural livelihoods and food security supply of NWFPs through soil and water conservation and the preservation of biodiversity. Therefore, the essential and critical role of forests to the sustainable development of the country cannot be overemphasized.

It is clear that in spite of its endowment and the numerous services forests can provide, the forestry sector has not been vibrant. Despite its potential significant contribution to the national economy, the immediate and underlying causes for its depressed performance could be attributed to

- i. Inadequate cross-sectoral coordination, resource governance and benefit sharing mechanisms and, active participation of key stakeholders in sustainable forest management.
- ii. Unsustainable and destructive harvesting systems such as charcoal and fuel-wood production, excessive and increasing forest clearance for farmland, forest degradation, uncontrolled annual burning, leading to reduced biodiversity and contributing to climate change.
- iii. Failure of local assessment and implementation of forest laws to prevent overharvesting;
- iv. As a consequence of inadequate forest management, there is widespread loss of productivity, erosion, siltation, reduction in stream flow and other negative impacts verging in many places upon desertification;
- v. Poor management of forest cover is probably contributing to climate change]
- vi. Fuel-wood demand increased and alternative energy not given sufficient attention at all levels.

CHAPTER 3

3.0 POLICY OBJECTIVES

The following specific objectives have been identified in order to meet the mission and goals of the forestry sector of Zambia:-

3.1 SUSTAINABLE FOREST RESOURCES AND ECOSYSTEM MANAGEMENT

Zambia is endowed with a variety of some high productive forest ecosystems such as the teak forests of the south-west region and the extensively occurring Miombo woodlands which are highly renewable. These extensive forests consist of forest reserves, forest areas under traditional leadership (forests on customary land). Coupled with these forests are plantations of exotic species that occur on the Copperbelt and local supply plantations across the country. Over the years, the forest estate has been continually depleted to the point that a considerable proportion of the forest land has been lost to other land uses. This has led to the declined productive and functional role of forests due to deforestation and forest degradation which has resulted into a reduced flow in forest products and the carbon sequestration role of forests.

For the country's forest estate to realize its full economic and development potential, the following objectives and strategies are required to be realized:

Objective 1

To ensure the integrity, productivity and the development potential of the forest resources:

The quality of Zambia's forests has over the years declined to alarming levels mainly as a result of inadequate capacity of the Forestry Department and inadequate involvement of communities and other stakeholders in sustainable forest management.

The principle of sustainable forest management should be applied at all times to ensure optimal utilisation of forests, forest products and services by all stakeholders while maintaining its integrity and renewable natural state.

Strategies

- i. Making available up-to-date information on forest management and sustainable utilisation of forest products and services.
- ii. According high priority to the preparation and implementation of community based forest management plans
- iii. Assessing and consolidating the productivity of forest reserves through stakeholders' participation in management, utilisation and, cost and benefit sharing
- iv. Ensuring forest health at all times by protecting forest resources against damage by fires, pest and disease outbreaks and against unsustainable harvesting practices.
- v. Revising, at periodic intervals, the legal status of Forest Reserves
- vi. Reclassifying the conservation status basing on current status and significance of each protected forest area.
- vii. Demarcating for conservation and protecting from other land uses such forest areas that are important in terms of ecological, cultural, archaeological, recreational and landscape values in order to maintain such values.
- viii. Establishing and implementing ecosystem restoration mechanism in which tree species that have been lost through industrial development should be replanted in alternative areas or payment of a fee equivalent to replanting an equal area with the same species.
- ix. Establishing criteria and indicators for sustainable forest management as parameters necessary for assessment of forest management effectiveness. Universally accepted criteria will establish biological, socioeconomic benefits and a policy framework for achieving forest sustainability; indicators provide a description and measurement of changes in the national criteria.
- x. Promoting sustainable forest management on titled land.
- xi. Applying the principles and practices of forest certification, product standardization, certification and labeling.

Objective 2

To ensure adequate protection of forests, by empowering local communities and promoting the development and use of wood, non-wood forest products and services:

Over the years forest management has centred mostly on policing with the Forestry Department as the sole player in the sector sidelining forest-based communities that live and are in direct contact with the forests on a daily basis. This scenario has led to the lack of appreciation of ownership of forest resources by local communities. Therefore, local communities have perceived the forest estate as belonging to the state and not to them and as such they have not collaborated with the state in forest management. All key stakeholders particularly local communities must be involved in the management of forests, forest products and services. Adequate sensitisation should be carried out to emphasise the importance of sustainable forest management as well as promote the use of forests, and NWFPs and services among local communities.

Strategies

- i. Provide in the Forest Act the necessary provisions that will facilitate collaborative forest management to enable the participation of local communities, traditional leadership, civil society and the private sector in the management and development of the forestry sector by defining roles, responsibilities and benefits of stakeholders.
- ii. Establishing a framework that empowers traditional leadership to deal with forestry misdemeanors committed by their subjects and other persons in customary lands that are within their jurisdiction.
- iii. Establishing joint forest management committees in target forest areas for effective coordination, management and mobilisation of resources.
- iv. Encouraging forest resource governance by individuals and local communities in customary lands.
- v. Establishing incentives and benefit sharing mechanisms for stakeholders involved in indigenous forest management and plantation forestry development and management.

- vi. Forest conservation measures for civil works and prohibition of encroachment of protected areas should be promoted.
- vii. Establishing participatory system for the award, preparation of environmental impact assessments (EIA), post-harvest evaluation and management of concessions in line with national EIA regulations.
- viii. Ensuring concession licensees manage natural regeneration after logging in a concession.

Objective 3

To promote investment in plantation forestry:

One of the reasons for increased pressure on natural forests has been the inadequate investment in plantation forestry. Since the establishment of the forest plantations on the Copperbelt and other parts of the country during the 1960s and 1970s, no other serious attempts have been made to expand forest plantations. The private sector should be encouraged, through adequate incentives, to participate in plantation forests development through afforestation, reforestation research and production of value added forest products.

Strategies

- i. Facilitating private sector participation in plantation forestry.
- ii. Facilitating the establishment of forest-based enterprises which focus on value-added products and whose economic value is captured for the country's development.
- iii. Promoting sustainable production methods that contribute to the long-term development of forest resources and that area underpinned by a comprehensive reforestation programme.
- iv. Establishing an appropriate incentive framework for investors in forest plantation development and management that include land availability and security of tenure for projects that respond to the national sustainable development criteria.
- v. Introducing marketing and pricing reforms that provide industrial fuel-wood users with incentives to invest in tree planting and woodland management.

Objective 4

To ensure sustainable management of forest ecosystems and biodiversity through the application of both scientific and local knowledge:

Apart from the provision of food, building/construction/carpentry and joinery materials, medicines and fuel-wood, forests also play a major role in the maintenance of the ecological balance and the hydrological cycle. Forests are important components in preserving our biodiversity which is under threat due to forest destruction and degradation. These crucial functions have not always been adequately appreciated in forestry development programmes.

Strategies

- i. Promoting a land-use system that ensures the protection of headwaters, river basins and terrestrial resources
- ii. Facilitating sufficient and sustainable allocation of land between major competing uses and sectors such as agriculture, energy and mining
- iii. Developing a management system that promotes the functional role of forestry in maintaining ecological and climatic functions.
- iv. Identifying and according special conservation status to additional areas of representative ecosystems, high endemism and, rare, threatened and endangered plant species.
- v. Promoting forest ecosystems and species conservation awareness at all levels.
- vi. Promoting the rehabilitation of degraded and threatened ecosystems and;
- vii. Promoting and integrating local knowledge in the management and utilisation of forest resources.
- viii. Establishing community forest regeneration funds to support community participation in indigenous forest management.
- ix. Providing for a stringent, yet consultative process for degazetting a local forest reserve and once a forest reserve is degazetted, a suitable replacement should be identified and managed as a local forest reserve in order for forest management systems to promote intra- and inter-generational equity.

- x. Adopting a precautionary principle in the adoption of new silvicultural technologies or other forestry activities in line with existing national legislation on genetically modified organisms and/or biosafety.
- xi. Devising and implementing phytosanitary measures to prevent the import and export of known and unknown invasive plant species and the spread of the same and other forest products across provincial and district boundaries.
- xii. Promoting sustainable management of trans-boundary forest ecosystems through institutional partnerships and bilateral or multilateral agreements;
- xiii. Promoting regular forest inventories and monitoring to prescribe an allowable cut for different forest tree species.

Objective 5

To improve the role of forests in the provision of ecosystem services and abatement of climate change:

Forests act as carbon storehouses and play an important function in influencing climate. Forest degradation and deforestation release carbon by acting as a source of GHG emissions. When forest lands are restored, they sequester carbon and become carbon sinks. Therefore, human-induced greenhouse gas (GHG) emissions are not limited to industrial or energy-related processes. The use of forests can therefore add to the problem of climate change, but it can also be a tool in formulating ways of mitigating it. Forest-related mitigation measures are, in the short to medium term, among the most practicable and cost-effective. Due to the inherent low opportunity costs, the use of forests can make an immediate and direct contribution to sustainable development and rural livelihoods.

Strategies

- i. Ensuring sensitization of amongst stakeholders of the effects climate change arising from forest products utilisation and management
- ii. Providing economic incentives and the necessary legal framework and technology to encourage and facilitate communities to gradually reduce their reliance on fuel wood and charcoal;

- iii. Promoting the establishment of carbon sequestration projects through regeneration management, agroforestry, carbon forests or plantation establishment and management;
- iv. Adopting strategies for increasing resilience and reducing vulnerability of forest ecosystems to climate change;
- v. Developing benefit sharing mechanisms originating from carbon sequestration projects;
- vi. Developing and supporting incentive mechanisms for agroforestry farmers during the initial establishment of their fallows;
- vii. Providing a framework for undertaking clean development mechanisms and reductions of emissions from deforestation and forest degradation initiatives in the forestry sector.
- viii. Increasing awareness and sensitization of local communities on effects of deforestation and forest degradation on the environment and livelihoods.

3.2 FOREST BASED INDUSTRIES AND NON-WOOD FOREST PRODUCTS DEVELOPMENT

The majority of the population of Zambia depend on NWFPs as a source of medicine, cultural identity, shelter, food, crafts, recreation and industrial raw materials. Essentially, every citizen benefits from the ecosystem service that forests provide in terms of carbon sequestration and maintenance of environmental flows. However, the contribution of non wood forest products and the ecosystem value from forests have not been well documented. Similarly, the potential of forest-based industries to deal in various forest resources and services has not been fully developed. This is due to a variety of problems ranging from inadequate skilled human resource to inadequate incentives for private sector investment in the forestry sector. At present the wood fuel industry is the single largest informal forest based industry providing about 90% of household energy requirements. To promote the role of the private sector in the development of the forestry industry in Zambia, the following objectives and strategies are proposed:

Objective 6

To promote the establishment and development of forest-based industries that respond to the national sustainable development criteria:

Even though Zambia is endowed with a rich resource base in forest raw materials, industrial development in this sector has been minimal. Most of Zambia's forest-originating raw materials have had to be taken outside the country for processing in raw form.

The potential of forest-based industries is not fully developed and the sector has experienced a variety of problems mainly as a result of inadequate skilled human resources and inadequate incentives for massive private sector investment in value added production.

The industry needs to be urgently revamped for it to contribute effectively to the national economy through job creation, export earnings and tax revenue for the treasury.

Strategies

- i. Creating a stable and conducive investment environment for the forestry industry through licensing, guarantee of sustainable wood supply, establishment of plantations and carbon forests
- ii. Encouraging capacity improvement and technology in the utilisation and capitalisation of existing and emerging forest based industries in areas such as carbon stock assessment, saw doctoring, wood preservation, drying, use of waste such as saw dust and forest enterprise management.
- iii. Providing training in managing certified forests, carbon trade, harvesting and preservation skills for entrepreneurs wishing to deal in NWFPs.
- iv. Providing incentives for the creation of enterprises and protection of forest-based livelihood systems which directly contribute to forest conservation and protection and respond to the national sustainable development criteria.
- v. Promoting and supporting forest-based ecotourism.

- vi. Facilitating incentives and supporting public private partnerships in the establishment of forest industries, especially small scale and cottage industries in potentially high value and marketable products such as honey, beeswax, carbon trading, rattan and timber.
- vii. Facilitating the establishment and operationalisation of the Timber and Honey Auction floor.
- viii. Ensuring that investments in primary forest products are placed in the hands of the citizenry in order to economically empower the citizenry.

Objective 7

To ensure the establishment and sustainable management of forest resources for wood fuel production:

Wood fuel is the largest source of energy in Zambia. It has been estimated that about 90% of rural and urban households depend on wood fuel for their energy needs. Exploitation of forests for wood fuel is one of the main causes of forest depletion and degradation. Given that the consumption rate of wood fuel is a function of population dynamics, the demand for the commodity is likely to keep increasing with the concomitant increase in Zambia's population putting the country at the risk of facing a wood fuel shortage in the near future. It is therefore essential that sustainable methods of exploitation and utilisation of wood fuel are developed and implemented.

Strategies

- i. Encouraging the establishment of private sector driven investment in wood fuel plantations in wood deficit locations that respond to the national sustainable development criteria.
- ii. Improving the efficiency and technology of charcoal production and utilisation that have a minimal carbon footprint.
- iii. Encouraging the utilisation of forest plantation species in charcoal production.

- iv. Encouraging, through dialogue with other stakeholders, the development of alternative sources of energy as a way of reducing greenhouse gas emissions and consumption of charcoal.
- v. Encouraging and establishing an incentive system for the expansion of small-scale entrepreneurs manufacturing energy saving cooking braziers and stoves (i.e. consuming limited quantities of charcoal).
- vi. Promoting and incentivizing the utilization of wood waste to generate energy such as biogassifiers and charcoal briquettes.
- vii. Promoting a multi-sectoral approach to the establishment of forest resources for wood fuel.

Objective 8

To recognise and support the development of value adding to non-wood forest products:

As indicated earlier, the majority of the Zambian people depend on NWFPs as a source of many components of livelihood including medicine, cultural identity, shelter, food, crafts, recreation, household incomes and source of raw materials. However, presently the contribution of NWFPs to the national economy and livelihoods has not been recognized as an important contributor and very little or no support at all is rendered to the promotion of value addition to these products. NWFPs can surpass timber and wood fuel in terms of contribution to poverty alleviation and export earnings and tax revenue as they have already compete favourably with timber and wood fuel in the provision of sub-sector employment creation and poor household income.

Strategies

- i. Encouraging and facilitating private sector investment in the production, value adding and marketing of NWFPs for investments that respond to the national sustainable development criteria;
- ii. Developing and encouraging harvesting techniques that ensure optimal regeneration of non-wood forest products
- iii. Promoting and encouraging small scale enterprises dealing in NWFPs such as carbon credits and, mushrooms, honey and bees wax processing

- iv. Promoting and encouraging the involvement of women in small scale enterprises dealing in NWFPs and
- v. Establishing a comprehensive understanding of the resource base by carrying out periodic inventories of NWFPs.

3.3 FORESTRY RESEARCH AND DEVELOPMENT, EXTENSION AND CAPACITY BUILDING

3.3.1 Forestry Research and Development

Forestry research is considered to be key to the development of the forestry sector. It provides the fundamental basis by which forestry information is discovered, correctly interpreted and accepted as technology or knowledge available for use and application in solving practical forestry problems. The overall goal of forestry research is to ensure that appropriate forest research methodologies and technologies are developed and applied for the proper management and utilisation of forest resources in the country. The post 1970s era has seen a considerable decline in trained human resources, research outputs and financial injections in forestry research. The situation has been made worse by the deteriorating performance of the national economy particularly in the last two decades.

The goal in forest research and development is to establish an efficient and effective forest research and development service to conduct research on all aspects of forestry and forestry industries in order to enhance forest productivity and efficient utilisation of wood, NWFPs and services through these objective and strategies:

Objective 9

To develop research expertise, facilities, an institutional framework and create an enabling environment to meet forestry research needs:

Research is important in forestry management as it generates information on which decisions are made in tackling forestry problems. Unfortunately, over the past years forestry research has not been active enough to make an impact in forestry management.

There is therefore need to ensure that the human resource within the research unit of the Forestry Department are equipped with adequate knowledge and skills to identify, initiate, analyse and interpret forest-based research problems/opportunities as well as disseminate the findings widely.

Strategies

- i. Restructuring the research function of the Forestry Department through the formulation of a problem solving oriented research master plan;
- ii. Ensuring the recruitment of adequately trained and specialised personnel and providing appropriate research equipment and other facilities;
- iii. Promoting and encouraging the involvement of the private sector in financing forestry research;
- iv. Facilitating and promoting the development of cheap and environmentally friendly sustainable and efficient methods and practices of producing and utilizing charcoal;
- v. Ensuring the institutionalisation of ventures such as the sale of research findings and new technologies and facilitating the provision of in-service training of research personnel to acquaint them with new technologies and innovations in forestry research;
- vi. Strengthening linkages and co-ordination between research and extension;
- vii. Increasing collaboration between forestry research and other research and training institutions both within and outside the country;
- viii. Promoting the incorporation and use of local knowledge in forestry research;
- ix. Encouraging the documentation and dissemination of forestry research findings to end users;
- x. Highlighting socio-economic and forest ecosystem costs and benefits of bio-fuel production and the increasing demand of other commodities;
- xi. Encouraging the use of multi-disciplinary approaches in research planning and implementation; and
- xii. Facilitating the development of appropriate technologies for the propagation and productivity, harvesting, processing and commercialization of economically important NWFs such as orchids, rattan, bamboo, honey and beeswax to enhance livelihoods.

3.3.2. Forestry Extension

A number of extension agencies have emerged with specific sectoral messages for example crop farming, livestock production, tree growing, energy, small- scale industry, birth control, and health. In forestry extension, there is also the need to put in place an effective and efficient system of delivering information on forestry development to target groups. This will be achieved through the following objective and strategies:

Objective 10

To strengthen and develop human capacity with extension skills and a service delivery framework to effectively and efficiently meet stakeholders needs:

Extension is an important component in forestry management. It is through extension services that information on the need and how to manage forests can reach the communities. Extension plays a vital role in enhancing awareness amongst the communities and serves as a link between forestry authorities including researchers, local communities and other stakeholders. Forestry extension has unfortunately not been performing as expected. There is therefore need to build capacity within the Forestry Department to establish a fully functional and effective extension branch.

Strategies

- i. Restructuring the Forestry Department so that it establishes a functional and dedicated extension unit
- ii. Promoting integrated approaches to forestry extension through collaborative arrangements with related agencies/departments and NGOs
- iii. Providing training to village forestry extension officers and to entrust them with the capacity that will enhance gender equity in local forest management
- iv. According high priority to gender balance in extension, training and service delivery; and
- v. Strengthening extension services through training and provision of appropriate and adequate facilities and financial resources;
- vi. Developing an interactive information management system at all levels.

3.3.3. Human Capacity Development

Development of the forestry sector requires adequate and appropriately qualified human resources to implement management strategies. Currently, the forestry sector is constrained by inadequate and untrained personnel and very weak training institutions. In addition, forestry training has in the past emphasized more on plantation forestry directed at meeting industrial demand for timber at the expense of indigenous forest management.

The country should realise that this situation will continue worsening unless a good mix of professional and technical personnel with sound knowledge and skills necessary for management, research and extension is available to help facilitate effective and sustainable forest management through stakeholder participation. It is necessary that the human resource base is developed through the following objective and strategies:

Objective 11

To develop and broaden skills and knowledge of personnel involved in forestry management and development, and support to training institutions:

Human resource development through training is an important vehicle of development in any sector. Forestry training in the country should place much emphasis on practical subjects and pays more attention to local knowledge systems in forest management. There is therefore need to ensure that all human resources involved in sustainable forestry management are equipped with all relevant knowledge and skills to enhance forestry development at all levels in the nation.

Strategies

- i. Supporting the operations and strengthening capacities of forestry training institutions;
- ii. Encouraging the development of appropriate training materials based on scientific and indigenous technical knowledge for sustainable forest management;
- iii. Improving and providing facilities to both men and women for formal and informal training at professional, technical and artisan level;

- iv. Facilitating transfer knowledge in forestry management and development, and skills improvement at local community level in order to improve the effectiveness of local community participation in forest management;
- v. Enhancing effective professional, technical and artisan training to forestry sector personnel;
- vi. Supporting the mainstreaming of emerging issues in forestry in the environmental subjects in high school curriculum.
- vii. Initiating mechanisms to strengthen the capacity of rural communities and producer groups to manage forests on a sustainable basis.

3.4. FOREST LICENCES

Licensing of forest activities serves the purpose of regulating exploitation of forest resources and raising revenue for the nation. However, the current licensing system has failed to meet this purpose due to the following:-

- i. Illegal utilization of forest resources namely exploitation without licences
- ii. Inadequate supervision of concession holders due to lack of transport and financial resources
- iii. Non-compliance with the conditions attached to the licence due to inadequate supervision and lack of penalties imposed on those contravening forest licence regulations
- iv. Under valuing of the forest products
- v. Existence of inadequate accountability mechanisms
- vi. Lengthy licensing procedures
- vii. Lack of forest management plans
- viii. Difficulties in obtaining licences
- ix. Lack of involvement of resident local community representatives and other stakeholders in the license approval process and monitoring of the exploitation of forest resources.

For the forestry sector to contribute positively to the national economy and the livelihood of the population, the following objective and strategies should be observed and adhered to.

Objective 12

To regulate the exploitation and ensure efficient use of forest resources and products:

Over exploitation of timber and other products constitute one of the contributing factors to forest degradation in Zambia. The lack of community involvement in monitoring the exploitation of forest resources by licence holders has had an adverse impact on the overall forestry management.

Strategies

- i. Developing guidelines and establishing an appropriate authority for issuance of commercial saw-milling and pit-sawing licences for short and long-term forest management and exploitation;
- ii. Ensuring transparency and decentralisation of licensing procedures to appropriate local forest authorities involved in Joint Forest Management;
- iii. Establishing and supporting the development of the cost and benefit sharing mechanisms of the benefits deriving from timber and NWFPs exploitation through Joint Forest Management arrangements;
- iv. Developing capacity at local levels in financial management and administration for efficient and effective management of forest resources;
- v. Ensuring that good pricing of forest products take into account current economic, social and environmental costs;
- vi. Establishing a two tier system of affordable forest products and services fees for local communities
- vii. Ensuring the participation of local community representatives in the licence approval process and the monitoring of the exploitation of forest resources; and
- viii. Decentralising and broadening the scope of the revolving fund to include local level structures.

- ix. Rationalizing forest licences to minimize transaction costs for government and the public.

3.5. EXPORT OF FOREST PRODUCTS AND CARBON TRADING

The export of forest products and carbon trading are important for the generation of foreign exchange earnings and for the capitalisation of the Zambian forestry industry sub-sector. However, this does not seem to have materialised and in some cases it has negatively affected the local industry and the resource base. In order to generate capital, employment and encourage sustainable management of forest resource, the following objective and strategies should be observed.

Objective 13

To ensure the contribution of the forestry sector to the national economy and the generation of foreign exchange for the capitalisation of the forestry industry:

Zambia's forest products and services have a ready market even at international level. Before the introduction of timber export regulations in 1997, illegal timber exploitation for the export market was on the increase. This denied government to earn money from its forest resources and as a result, the true picture of the forestry sector contribution to the national economy has not been well captured.

Strategies

- i. Promoting and supporting increased production of export quality and value addition, through high quality secondary and tertiary process, to wood and NWFPs at local level through private and public investments;
- ii. Establishing mechanisms to value carbon produced in carbon forests and quantifying the volume of carbon trade
- iii. Developing capacity for stakeholders involved in monitoring wood, NWFPs and carbon trade to be able to quantify and value such products
- iv. Establishing a forest products export monitoring system

- v. Creating competitiveness for local communities to meaningfully participate in the global trade by ensuring access to aid for trade.
- vi. Devising and implementing binding and sustainable bilateral and multi-lateral agreements and/or international conventions to stop transboundary misdemeanors in forestry.
- vii. Establishing international export codes and standards for forest products; and.
- viii. In line with the national liberalisation policy, simplifying the export process for forest resources;
- ix. Prohibiting the export of raw timber in a bid to encourage value addition and maximizing benefits to the local economy.

3.6. MAINSTREAMING GENDER, HIV/AIDS AND PERSONS WITH SPECIAL NEEDS IN SUSTAINABLE MANAGEMENT OF FOREST RESOURCES AND FOREST INDUSTRIES DEVELOPMENT

Women who are the primary users of forest resources and important oral depositories of forestry traditions often have their rights at variance with those of men with regard to forest ownership and governance, policy formulation and management decisions, and consequently their interests are inadequately represented in the country's development process. It is therefore, necessary to integrate sustainability with gender equity and social justice through the following objective and strategies:

Objective 14

To ensure gender equity, HIV/AIDS and the interests of persons with special needs are mainstreamed in all aspects of forestry management, industrial development, production and utilisation of forest products and services, and for the forestry extension, training and education sub-sectors:

It is a known fact that women play an important role in the utilisation of forest products. They are the major collectors of firewood, fruits, mushrooms and medicines from the forests. Unfortunately, the decision making process in forest management at both community and national levels is male dominated.

All community members including men, women and children are expected to participate fully in the development of the forestry sector while enjoying equal rights to training, education, research, ownership and governance, financial and other material support and benefit.

Strategies

- i. Promote mainstreaming gender in the development and implementing of school, college and university curricula for forestry education and training that suit both men and women;
- ii. Ensuring that women, the youth and persons with special needs receive equitable participation in and benefits from forest management and development programmes;
- iii. Promulgating and implementing workplace policies to facilitate mainstreaming concerns of gender, HIV/AIDS and persons with special needs and population increase in forestry;
- iv. Supporting forestry management strategies that respond to the needs of segregated gender needs and persons with special needs through targeted support systems for capacity building, seed capital and technology development;
- v. Promoting access to forest products and services, and classification of land for forest protection and management does not disenfranchise women, the youth and persons with special needs from their land and create distortions in traditional tenure systems with women, the youth and persons with special needs absorbing the costs.
- vi. Encouraging women, the youth and persons with special needs to develop their small NWFPs enterprises into viable and income-generating enterprise that respond to the national sustainable development criteria.

3.7 INTERNATIONAL OBLIGATIONS

In the interest of regional collaboration, the Government of the Republic of Zambia will, wherever and whenever possible, collaborate with neighbouring states in the sustainable management of transboundary forest resources in order to maintain the integrity of forest ecosystems. In the pursuit of sustainable forest management, Zambia will endeavour to be a model for the conservation and sustainable utilization of forest products and services.

Zambia will also maintain the observation of international forest-related conventions and agreements to which she is a signatory such as CBD, CITES, Convention on Climate Change, Convention on Combating Desertification, Convention on Wetlands (Ramsar), Convention on the Protection of the Ozone layer, the Montreal Protocol, UNCED Declarations agreed to at Rio in 1992, UNFCCC, the Global Statement of Principles on Forests and those that will be formulated in the course of the duration of this policy. It is therefore, necessary to integrate national efforts in sustainable forest management with regional and international obligations through the following objective and strategies:

Objective 15

To ensure that international obligations are carried out to engender a contribution to efforts at the international level to increase environmental and socio-economic benefits that accrue from sustainable management of forest resources and, reduce emissions from deforestation and degradation and the impact of greenhouse gas emissions.

Strategies

- i. Participate in any negotiations for the possible development of international conventions on forests and natural resources consistent with the conventions on biological diversity and climate change
- ii. Implement Zambia's international obligations under Agenda 21 of the United Nations Conference on Environment and Development.
- iii. Support the SADC protocol on forests and natural resources, the International Tropical Timber Organization and CITES efforts to realize the targets of achieving trade related to timber and plant species from sustainably managed forests and managing trade in endangered species.
- iv. Foster awareness of the benefits of bilateral and multilateral activities that are consistent with Zambia's international responsibilities by supporting research, through training, and providing professional and technical expertise to manage such obligations and domesticated agreements.

Policy statements related to the country's international obligations are expected to engender a contribution to efforts at the international level to reduce emissions from deforestation and degradation and the impact of greenhouse gas emissions.

Through the achievement of these policy objectives related to socio-economic and ecologically sustainable forest management, maintaining and increasing the total natural forest cover, and by increasing the percentage of land under plantations, Zambia is expected to contribute to minimizing the impact of greenhouse gas emissions and conserving biodiversity.

CHAPTER 4

4.0 INSTITUTIONAL AND LEGAL FRAMEWORK

4.1 INSTITUTIONAL MANDATE FOR POLICY IMPLEMENTATION

The forestry sector has several linkages with other institutions whose activities may be based, or to a large extent rely on goods and services provided by forest resources. In order to implement the different measures outlined in this policy document, it should be recognised that there is need for the government to make significant institutional reforms. It is equally imperative that the necessary legal reforms consistent with the proposed institutional structure and the prevailing socio-economic environment in the country be effected at national, provincial and district levels.

4.1.1 Role of Central Government

Ministry of Tourism, Environment and Natural Resources. The Ministry has overall responsibility for forest resources development. The role of Government is to formulate and review forest policies and co-ordinate their implementation. The Government shall also encourage the establishment of forest plantations, proper and effective management of indigenous forest, and provide for an environment that is conducive for stakeholder participation. In addition, it shall create an enabling environment for the private sector to invest in forest plantation establishment and management, NWFPs enterprise development, establishment of carbon forests, carbon trading, value addition, trade and certification. It is also the responsibility of the Government to ensure that all investments in forestry arise out of public private partnerships (PPP), and respond to the national sustainable development criteria that will promote socio-economic and environmental sustainability through reduced emissions from deforestation and degradation (REDD).

Forestry Department. The Forestry Department shall be restructured to improve its national and international profile, management effectiveness and geographic coverage. It will be responsible for capacity development, co-ordination, implementation and enforcement of rules and regulations pertaining to forestry development at national, provincial, district and forest reserve levels within the ambit of this policy and related sector policies. In order to increase its management effectiveness and geographic coverage, the Forestry Department shall re-introduce and adequately equip the forest scouts cadre, previously referred to as forest guards. This category of technical personnel is key to the day to day linkage between the Forestry Department and forest-based communities.

The Forestry Department through providing incentives will encourage and empower people and investment houses to get involved in forest management. In its pursuit to collaborate, the Forestry Department will consult stakeholders in the determination of the roles of different stakeholders in sustainable forest management. The Department shall also support other natural resources management sectors in the interest of ensuring that the nation's natural resource heritage is sustainably managed. In its pursuit to collaborate and encourage collaborative forest management, the Forest Department shall work with other government departments to constitute local level forest management units.

Sustainable forest management for the purpose of this policy means establishing, implementing, monitoring and evaluation of conservation, protection and utilisation of the various programmes and strategies pertaining to forest resources. Forest protection in this context applies only to forests that have a unique purpose aside from a productive function. Such forests to be protected will include forests with threatened or rare species, forests with high endemism, other unique forest ecosystems and catchment forests.

4.1.2 Local Government

The role of local government shall be to formulate by-laws, enforce them and facilitate proper and smooth administration of forest estates, in conformity with this policy and existing legal frameworks.

The local government shall be involved in setting aside land for forestry establishment, management, conservation and investment purposes and participate actively in Joint Forest Management.

4.1.3 Traditional Rulers and Institutions

The tradition rulers shall be involved in the administration and management of forest estates within the area of their jurisdiction. They shall encourage the setting aside of land for forestry establishment, management, conservation and investment purposes and advise government on policy formulation and implementation as well as facilitate local community's participation in management and sustainable utilisation of forest resources.

4.1.4 Political Leadership

Political leadership means Ministers, Members of Parliament (MP), Councillors and party leaders at all branches of the political establishment. These shall be supportive to the implementation of this policy, local initiatives and be responsible for resource mobilisation, interpretation and implementation of government policies and legislation.

4.1.5 Local Communities

The local communities including community based organizations (CBOs), shall advice Government on policy formulation and implementation. They shall be the key actors in planning and management of forests and investment in forestry at local levels. They shall also be the implementers and the determinants of tree species and technologies to be used in community based forestry plantation establishment and management, and play a key role in Joint Forest Management. Therefore, local communities and CBOs will also be required to put in place participatory forest management systems to promote sustainable forest management in open areas.

4.1.6 Traditional Medicines Practitioners and Healers

The practice of tradition healing has increasingly become widespread in the country mainly due to increased poverty among the population.

The majority of people cannot afford to attend formal medical cares. The tradition healers extract considerable amount of tree species, barks, herbs and grasses from forests for healing purposes. Traditional medicinal practitioners and healers shall therefore participate in participatory forest management and be proponents fostering sustainable utilisation, conservation of rare and endemic species and provide local knowledge on various medicinal plants species for the conservation of biological diversity in the country.

4.1.7 The Private Sector

Individuals and organisations that are interested in business transactions related to forest estate management and utilization shall be partners in forestry development activities that respond to the national sustainable development criteria. The private sector shall also be expected to build capacity by providing human and financial resources for forest estate management and utilisation. Additionally, the private sector is expected to channels of appropriate technology transfer through investment in plantation forestry, forest utilization and management.

4.1.8 Civil Society

There exist already in the country a civil society that are interested in community-oriented development and conservation of forests and the environment. They are all endowed with considerable experience that the Forestry Department needs to capture to facilitate the dissemination and adoption of technologies for sustainable management of natural resources. It should be recognised that meaningful participation that take into account the range of both local and international stakeholders is greatly required in the process of planning, implementing, managing, and monitoring and evaluation of interventions leading to conservation of natural resources. Some of these partners have considerably extended their roles to the grass-root levels of the country and created innovative processes that need to be captured ensure effective management of forest resources. NGOs and CBOs shall be active partners in forestry development and management. The civil society shall play a determinant role in this endeavour by ensuring gender mainstreaming, equity in benefit sharing, and equitable participation of stakeholders in the management and utilisation of forest resources. Recognition and mainstreaming costs and benefits of persons with special needs shall also be key in the management of forest resources.

Moreover, the civil society shall be supportive of the popularization of appropriate forestry practices and technologies, build capacity and provide extension services for forest management systems that conform to the national sustainable development criteria. Civil society will also be expected play the advocacy and developmental role related to participatory forestry management.

4.1.9 Education and Research Institutions.

Concerned with forest natural resources over-exploitation and the concomitant depletion of the biological diversity and the degradation of the ecosystems in the country, concerted efforts shall be joined between research institutions dealing with natural resources and environmental issues to develop environmentally sound technologies for forest and natural resources recovery, and sustainable utilization of natural resources with the ultimate goal of improving livelihoods of the population. Education and Research institutions shall provide advice, knowledge, technologies and appropriate management systems and practices. With consistent support from Government and other stakeholders, they shall be a frontline for technology development in all areas of forestry and be expected to provide appropriately trained human resources to the forestry sector.

4.1.10 Cooperating Partners

Cooperating partners shall be partners in development and shall be facilitators in building capacity and provision of finances.

4.2 LEGAL FRAMEWORK

4.2.1 Legislative Reform Objectives

There are several factors that necessitate the need for new forest legislation. These include:

- i. The need to resolve the difficulties of establishing the Forestry Commission under the present legislation (Forest Act of 1999)
- ii. The need to restructure the Forestry Department cognizant of the stipulations related to establishing the Forestry Commission under the present legislation (Forest Act of 1999)

- iii. The need to resolve the difficulties of implementing community participation in forest management, forest resource governance, cost and benefit sharing mechanisms under the present legislation (Forest Act of 1999);
- iv. The need to harmonise the Forest Act with other relevant sectoral pieces of legislation;
- v. The need to bring to the fore issues and strategies related to climate change vis-à-vis the role of forests in the abatement of climate change and
- vi. The need to reflect relevant provisions arising from international conventions and agreements to which Zambia is a signatory/party.

In order to make a strategic shift away from the predominant sanction and command approaches to stakeholder participation, governance, and costs and benefit, there is need for new legislation that will provide for the following:

- i. Participation of local communities, traditional leadership, civil society and the private sector including gender and persons with special needs' mainstreaming in sustainable forest management and conservation of biological diversity;
- ii. Continued existence of protected forests or forest reserves that are appropriately reclassified on the basis of their conservation status and significance;
- iii. Revision of laws regulating the establishment of National and Local Forests to provide for stakeholder participation, especially Joint Forest Management, including empowerment and the sharing of costs and benefits; and
- iv. Empowering traditional leaders and local communities in forest establishment and management.

CHAPTER 5

5.0 RESOURCE MOBILIZATION

It is a well known fact that the inadequate contribution of the forestry sector to the national economy and livelihoods, and forest management ineffectiveness are both largely due to inadequate public financing of the forest sector.

The necessary support for developing, testing and transferring sustainable forest natural resources management practices and technologies will require sufficient time and considerable resources for research and development activities and for intensive implementation processes involving participation of researchers, extension agents, community households and other stakeholders like locally-based NGOs and CBOs. It is for this reason that the support and commitment of both the public and private sectors are required for the urgent implementation of this policy.

To this end, political will and viable sources of funds shall be vigorously pursued so that the benefits of the various programmes undertaken in the forestry sector can be realised and accessed to meet a flourishing economy and a sound environment. The following sources of funding have been identified:

- i. Adequate budgetary provision from Parliament for indigenous forest management, forest plantation establishment, extension and support for local level forest management units.
- ii. Revolving fund to be established from licensing of forest products and services
- iii. Revenue generated from research activities
- iv. Donations and endowments from private organizations
- v. Government assistance and support from Cooperating Partners.

CHAPTER 6

6.0 PLAN OF ACTION, MONITORING AND EVALUATION

To ensure that the implementation of this policy is systematic, a detailed Plan of Action has been worked out in the Zambia Forest Action Plan (ZFAP) and whose planning phase came to a conclusion in 1997 shall be followed. The Ministry of Tourism, Environment and Natural Resources (MTENR) shall develop and implement a rigorous results-oriented monitoring and evaluation system to which the Forestry Department and stakeholders engaged in forestry shall respond.

6.1 The National Forestry Master Plan

The Forestry Department shall formulate a National Forestry Master Plan which will provide a strategic framework with clear targets which will be informed by the stipulations of the Zambia Forest Action Plan. In order to implement the provisions of the National Forestry Master Plan, the Forestry Department shall ensure that Forest Management Plans are formulated for each type of forest. The Forest Management Plans will then be implemented by the Annual Forestry Plan of Action. The Forestry Management Plans will have clearly defined and measurable indicators and a monitoring and evaluation framework.

Notwithstanding the foregoing, the following shall be a part of the implementation plans

- i. Forests resources in forest reserves will be managed using Annual Forestry Plan of Actions implemented through the Provincial Forest Management Plans.
- ii. The distribution of coupes or concession areas in a forest should conform to approved forest operation plans, subject to the Management Plan.
- iii. Individual forest operations, such as by concession or casual licenses will be conducted in accordance with approved action plans, which incorporate a map and a schedule specifying relevant conditions.

- iv. Action plans will ordinarily include operational details of planned access to the coupe or concession areas additional to the road system approved under the Management Plan or operations plan.

6.2 DEVELOPMENT OF CRITERIA AND INDICATORS FOR SUSTAINABLE FOREST MANAGEMENT

The Forestry Department in consultation with stakeholders, shall establish universally accepted criteria and indicators (C & I) for sustainable forest management. Criteria and indicators will benefit the forestry sector as they will be used to assess its performance and improve its economic standing and contribution to GDP. Criteria and indicators will increase the value of forest products which will provide rural economies with high returns.

6.3 MONITORING AND EVALUATION

The MTENR and the Forestry Department shall develop and implement a transparent monitoring and evaluation system. The M&E plan shall be implemented at the summit of the forestry management system, the province, district, forest concession, and any other lower level of forest management, protection or utilisation.