UNITED REPUBLIC OF TANZANIA

DRAFT NATIONAL FOREST POLICY

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The Government of the United Republic of Tanzania approved the current National Forest Policy in March 1998. In 2002, Forest Act No. 14 of 2002 (CAP 323 R.E 2002) was enacted. The Policy indicates in statement 25 and its directions that the legislation for the sector will be periodically updated and harmonized with the legislation of other related sectors. Since the legislation follows an approved policy, any major revision of the legislation has to start with a revision of the policy. Since approval of the current policy, there have been changes in national macroeconomic and environmental frameworks and global obligations. The National Forest Policy of 1998 has been reviewed taking into account these changes and is an outcome of a consultative process that involved both sectoral and cross-sectoral stakeholders. This Policy also takes into account main findings/conclusions, recommendations and issues for policy review of five studies and covers all forests regardless of ownership or administration and includes trees on farmlands.

The overall goal of the National Forest Policy is to enhance the contribution of the forest sector to the sustainable development of Tanzania and the conservation and management of her natural resources for the benefit of present and future generations.

The objectives of the forest sector on the basis of this overall goal are:

(i) Ensured sustainable supply of forest products and services by maintaining sufficient forest area under effective management;
(ii) Increased employment and foreign exchange earnings through sustainable forest-based industrial development and trade;
(iii) Ensured ecosystem stability through conservation of forest biodiversity, water catchments and soil fertility; and
(iv) Enhanced national capacity to manage and develop the forest sector in collaboration with other stakeholders.

Based on the objectives the following four policy areas were identified:

(i) Forest land management
(ii) Forest-based industries and products
(iii) Ecosystem conservation and management
(iv) Institutions and human resources

The Policy has a total of 41 policy statements with directions for implementation in these four policy areas.
ABBREVIATIONS AND ACRONYMS

CBD  Convention on Biological Diversity
CBFM  Community Based Forest Management
CITES  Convention on International Trade in Endangered Species of Fauna and Flora
CO$_2$  carbon dioxide
CSOs  Civil Society Organisations
D-by-D  Decentralisation by Devolution
EAC  East African Cooperation
EIA  Environmental Impact Assessment
FAO  Food and Agriculture Organisation of the United Nations
FBD  Forestry and Beekeeping Division
GDP  Gross Domestic Product
JAST  Joint Assistance Strategy for Tanzania
JFM  Joint Forest Management
LMDA  Logging and Miscellaneous Deposit Account
MDGs  Millennium Development Goals
MNRT  Ministry of Natural Resources and Tourism
MTEF  Medium Term and Expenditure Framework
NFP  National Forest Programme
NGO  Non-Governmental Organisation
NPES  National Poverty Eradication Strategy
NSGRP  National Strategy for Growth and Reduction of Poverty
NWFP  Non Wood Forest Products
PES  Payment for Ecosystem Services
PFM  Participatory Forest Management
PMO-RALG  Prime Minister’s Office, Regional Administration and Local Government
PRRS  Poverty Reduction Strategy
PRSP  Poverty Reduction Strategy Paper
SADC  Southern Africa Development Community
TAS  Tanzania Assistance Strategy
TFAP  Tanzania Forestry Action Plan
TFS  Tanzania Forest Service
TMTP2020  Tanzania Mini Tiger Plan 2020
UNCCD  United Nations Convention On Combating Desertification
UNCED  United Nations Conference on Environment and Development
UNFCCC  United Nations Framework Convention on Climate Change
CHAPTER ONE

FRAMEWORK FOR THE NATIONAL FOREST POLICY REVIEW

The review of the national forest policy is based on both national and global macro-economic frameworks and environmental policy

1.1 National Macro-economic Policy Framework and Strategies
1.1.1 National Development Vision 2025 and Poverty Reduction Strategies

Since the mid-1980s, Tanzania's economy has undergone fundamental transformation through wide-ranging political and economic reforms and policy actions. The role of the government has been redefined to be that of policy formulation and guidance, law and order, regulatory and public sector support functions while the private sector has been assigned to undertake production, processing, commercial and marketing functions. The policy thrust of the transformation process is on macroeconomic stability, public sector efficiency, putting in an enabling environment to facilitate the effective participation of all actors in development, and evolving a long-term perspective for the dynamic development of the economy. The reforms have also included decentralisation by devolution (D by D). D by D entails decentralisation by devolution of powers and resources to the local government.

The current medium-term planning and budgetary framework underscores the following policy objectives:

(i) Achieving a real rate of economic growth well in excess of the expected population growth in order to attain real improvement in the living standards;
(ii) Reducing the rate of inflation to below 10 %;
(iii) Reducing external dependence by creating self-sustained internal and external balances;
(iv) Substantially reducing the role of the public sector in direct involvement in the productive sector and letting the private sector assume the leading role;
(v) Improving the efficiency of public expenditure by properly utilizing the scarce resources in the priority sectors;
(vi) Undertaking investment in the infrastructure for rehabilitation and development; and
(vii) Undertaking investment in the sectors dealing with human development particularly the health, education, water and environment sectors.

The long-term development perspective plan is embodied in Tanzania's Development Vision 2025, a development vision based on the outcomes of economic reforms pursued since 1986. The Tanzania Development Vision 2025 foresees that by the year 2025 Tanzania should have created a strong, diversified, resilient and competitive economy that can effectively cope with challenges of development and that can also easily and confidently adapt to changing market and technological conditions in the regional and global economy. There are five main targets to be attained by 2025:
(i) High quality livelihood;
(ii) Peace, Stability and Unity;
(iii) Good governance;
(iv) A well educated and learning society; and
(v) A competitive economy capable of producing sustainable growth and shared benefits.


Accordingly, NSGRP recognises the contribution of all sectors towards growth and poverty reduction and stresses the cross-sector collaboration and inter-sector linkages and synergies. Environment and conservation of natural resources feature as important development issues that crosscut the three clusters namely (i) Growth and reduction of income poverty, (ii) Improvement in quality of life and social well-being, and (iii) Governance and accountability.

In addition, Joint Assistance Strategy for Tanzania (JAST) that identifies priority areas for external support was launched in 2006 as a national medium-term framework for managing development cooperation between the Government of Tanzania (GoT) and Development Partners in order to achieve national development and poverty reduction goals.

NSGRP will require increased commitment and resources from domestic stakeholders and increased assistance from the development partners in the medium term. To increase the effectiveness of aid, Tanzania is pursuing the principles laid down by JAST for harmonisation of aid modalities for growth and reduction of poverty. It is envisaged that fast growth will be pursued while effectively reversing current adverse trends in the loss and degradation of environmental resources such as forests, fresh water, climate, soils and biodiversity and in the accumulation of hazardous substances. The implementation of Vision 2025 should ensure that increased utilisation of natural capital including forests does not harm the environment

1.1.2 Economic growth and the environment

Tanzania’s rich natural resources constitute a major wealth asset which is fundamental for growth and economic development. All the main economic sectors namely agriculture, mining, tourism, wildlife, forestry and fisheries are based on natural resources. In all these sectors, there are important links between management of the environment and natural resources, sustained growth and poverty reduction.

Agriculture has been described as “the back-bone” of the Tanzanian economy. Modernisation and expansion of agriculture call for careful consideration of the adverse
effects that intensified irrigation, pesticides, fertilisers and changed crops may have on the environment such as water pollution, reduced water flows, deforestation and land degradation.

Over the last seven years (2001 – 2007), the economy registered substantial and sustained improvements in macroeconomic stability and efficiency in resource allocation, that has contributed to a positive trend in the growth path of the overall real GDP during the period. Contrary to the overall economic growth, growth in the hunting and forestry sub-sector dropped from 4.6 % in 2006, to 2.9% in 2007, mainly attributed to restrictions imposed by the government on logging activities and the export of logs during the year to curb illegal trade. There is need to balance economic growth and environmental conservation in the course of implementation of Vision 2025.

1.2 Environmental framework

The National Environmental Policy of 1997 defines the environmental framework for the forest policy since forestry is a component of environment. The overall objectives of the National Environmental Policy are:

(i) To ensure sustainable and equitable use of resources for meeting the basic needs of the present and future generations without degrading the environment or risking health or safety;

(ii) To prevent and control degradation of land, water, vegetation and air which constitute our life support systems;

(iii) To conserve and enhance our natural and man-made heritage, including the biological diversity of the unique ecosystems of Tanzania;

(iv) To improve the condition and productivity of degraded areas including rural and urban settlements in order that all Tanzanians may live in safe, healthy, productive and aesthetically pleasing surroundings;

(v) To raise public awareness and understanding of the essential linkages between environment and development and to promote individual and community participation in environmental action;

(vi) To promote international cooperation on the environment agenda, and expand our participation and contribution to relevant bilateral, sub-regional, regional and global organisations and programs, including implementation of conventions.

The environment is vital in the economic development of Tanzania. It provides the basic resources for virtually all socio-economic activities and holds natural habitats, plants and animals that are art of an irreplaceable global heritage, waste receptacle and a foundation for eventual alleviation of abject poverty. It follows therefore that the major thrust of environmental management is protection of the natural living space of humankind and integration of environmental scarcity in making decision on all economic issues and activities.
The government in collaboration with various stakeholders has put emphasis on promoting, strengthening and sensitising communities and individual's participation as a strategy to invigorate environmental conservation and management in order to raise the capacity and ability of the communities and individuals in sustainable management for their own benefits and for the future generations.

The government adopted sector policies related with the forest sector namely mineral, wildlife; fisheries; water; agriculture and livestock and land which put priority on conservation and management of natural resources and environment, raising public awareness and understanding of the linkages between environment and livelihood and promoting international co-operation on environmental agenda.

The current global, regional and national environmental conservation and management efforts aim at overcoming poverty-related problems, diseases, food insecurity and insufficiency, shelter, unsafe water, inadequate energy supply and unemployment. Growing awareness of the general public and individuals on advantages of sound environmental conservation and management forms the basis for sustaining the resources and the environment. This goes together with implementation of sound strategies on poverty eradication as poverty is highly tied with unsustainable resources utilisation and environmental degradation and promotes joint gender efforts.

There is a clear cause-and-effect relationship between poverty and environmental degradation: environmental degradation leads to widespread poverty and poverty is a habitual cause of environmental degradation. Satisfaction of basic needs is therefore an environmental concern relevant to environmental policy. Investment in development is vital for environmental protection because the environment is the first victim of acute poverty, urban overcrowding, overgrazing, shrinkage of arable land and desiccation.

The ownership of land and natural resources, access and the right to use them are of fundamental importance, not only for more balanced and equitable development, but also to the level of care accorded to the environment. It is only when people can satisfy their needs, have control of the resource base as well as have secure land tenure that long-term objectives of environment protection can be satisfied. The communal tenure of village lands which are administered by village councils provides a good legal environment for the development of community-based forest and woodland management.

Science and technology have a central role in the exploitation, processing and utilisation of natural resources and in the resulting environmental impacts. The primary objective in this area is the promotion of environmentally sound technologies, i.e. technologies that protect the environment; are less polluting, use all resources in a more sustainable manner, recycle more of their wastes and products and handle residues in a more acceptable manner than the technologies which they are substitute.

Tanzania is one of 34 biodiversity hotspots in the world. Programmes for the conservation and utilisation of biodiversity shall be pursued to prevent and control the causes of significant loss of biological diversity. Policies, strategies and programmes for the conservation of biological diversity and sustainable use of biological and genetic resources shall be integrated into relevant sectoral/cross-sectoral policies, strategies and programmes.
Environmental impact assessment (EIA) is a planning tool used to integrate environmental considerations in the decision making process to ensure that unnecessary damage to the environment can be avoided. As a part of the implementation of the environmental policy, guidelines and specific criteria for EIA will be formulated.

Regarding public participation and education, environmental management must be everybody’s responsibility. The major responsibilities of government institutions and non-governmental organisations are to assist local communities by making them aware of their own situation and supporting them to become responsible for their own destiny. The fundamental prerequisites for the achievement of sustainable development is broad public participation in decision-making, including the participation of individuals, groups and organisations in environmental impact assessments and decisions, particularly in those which potentially affect the communities in which they live and work.

The private sector, particularly within business and industry, can play a major role in reducing the stress on resource use and the environment. Improvement of production systems through technologies and processes that utilise resources more efficiently and generate less waste, that reclaim, recycle and reuse by-products is an obligation of business and industry. The private sector and the community of non-governmental organisations therefore offer a national network that should be tapped, enabled and strengthened in support of efforts to achieve environmental objectives. The role of women in environmentally related activities will be promoted with a view of achieving increased women’s involvement in such areas as forestry, agriculture and water management programmes.

1.3 Global Frameworks and Obligations

1.3.1 Trade Liberalisation

The implementation of trade liberalization policies in Tanzania has been marked by both positive and negative social and environmental impacts. On the positive side, trade liberalization policies in the forestry sector have encouraged the expansion of production and trade in forest products, thereby accelerating the macroeconomic contribution of the sector. Prior to trade liberalization for example, the sector’s contribution to total trade was 3 – 4% of total exports, but after adoption of trade liberalization, the contribution jumped to about 11% of the total country’s exports. Other aspects of positive results of implementing trade policy changes and related measures are increased importation of inputs, growth in sector investment, increase in value addition, GDP and employment.

Environmental impacts of trade liberalization in the forestry sector may include increased rate of forest product extraction thereby fuelling deforestation. Both consumption and production processes of forest products have resulted in increased atmospheric carbon dioxide, particularly through burning forest products for fuel or as a result of uncontrolled fires during the process of production. Following liberalization, trade in forest products including charcoal products has increased. The consequence has been increased forest destruction.
1.3.2 Globalisation

In general terms, globalisation has led to greater movement of people, goods, capital and ideas due to increased economic integration which in turn is propelled by increased trade and investment. Globalisation provides opportunities and challenges. One of the benefits of globalization is improved environmental awareness and accountability which has contributed to positive environmental outcomes by encouraging the use of more efficient, less-polluting technologies and facilitating economies’ imports of renewable substitutes for use in place of scarce domestic natural resources. Regarding challenges of globalisation, the environment has been harmed due to expansion in agriculture and mining, among others.

1.3.3 Regional obligations

Tanzania is a member of the East African Cooperation (EAC) and Convention for the Protection, Management and Development of the Marine and Coastal Environment of the Eastern African Region and Related Protocols,

Partner States of the EAC recognise that development activities may have negative impacts on the environment leading to its degradation and depletion of natural resources and that a clean and healthy environment is a prerequisite for sustainable development. The Partner States therefore, among others, have agreed to take concerted measures to foster co-operation in the joint and efficient management and sustainable utilisation of natural resources including forests within the Community and undertake, through environmental management strategy, to co-operate and coordinate their policies and actions for the protection and conservation of the natural resources, including forests and environment against all forms of degradation and pollution arising from developmental activities.

The obligations under the Marine and Coastal Environment of the Eastern African Region and Related Protocols convention include the Contracting Parties individually or jointly, taking all appropriate measures in conformity with international law and in accordance with this Convention and those of its protocols in force to which they are party, to prevent, reduce and combat pollution of the Convention area and to ensure sound environmental management of natural resources including forests, using for this purpose the best practicable means at their disposal, and in accordance with their capabilities.

Tanzania is also a member state of Southern Africa Development Community (SADC) and signatory of SADC Protocol on Forestry. The Protocol focuses on promoting the development, conservation, sustainable management and utilisation of all types of forests and trees, trade in forest products throughout the region in order to alleviate poverty and generate economic opportunities for the peoples of the region and achieve effective protection of the environment, and safeguard the interests of both the present and future generations.

1.3.4 International obligations

The government has the following international obligations relating to environmental management: (i) Convention on Biological Diversity (CBD), (ii) United Nations Convention
on Combating Desertification (UNCCD), (iii) United Nations Framework Convention on Climate Change (UNFCCC), (iv) Convention on International Trade in Endangered Species of Fauna and Flora (CITES) and Millennium Development Goals (MDGs).

CBD focuses on conservation of biological diversity, the sustainable use of its components and the fair and equitable sharing of the benefits arising out of the utilization of genetic resources.

The objective of the UNCCD is to combat desertification and mitigate the effects of drought in countries experiencing serious drought and/or desertification, particularly in Africa. Combating desertification includes activities which are part of the integrated development of land in arid, semi-arid and dry sub-humid areas for sustainable development which are aimed at (i) prevention and/or reduction of land degradation; (ii) rehabilitation of partly degraded land; and (iii) reclamation of desertified land.

UNFCCC aims at stabilizing greenhouse gas concentrations in the atmosphere at a level that would prevent dangerous anthropogenic interference with the climate system (climate change). Climate change is impacting on forests and forest ecosystems and therefore environment. The problem is manifesting itself through, amongst others, droughts, unreliable water supplies and increasing fire intensity. River flows and water stocks in reservoirs may decline considerably under a warmer climate while forest ecosystems may shift their ranges and lose some of their biodiversity.

On the other hand, forests are important sinks for removing carbon dioxide from the atmosphere and are currently one of the technologies being used to mitigating future climate change. Forest loss and other land use change contribute 20-25% of greenhouse gases; avoiding forest loss is now part of the solution in tackling climate change.

CITES is an international agreement between governments whose aim is to ensure that international trade in specimens of wild animals and plants does not threaten their survival and it accords varying degrees of protection to more than 33,000 species of animals and plants.

In September 2000, at the United Nations Millennium Summit, world leaders agreed to a set of time bound and measurable goals and targets for combating, among others, poverty, hunger, disease, illiteracy, and environmental degradation. The goals which are known as Millennium Development Goals (MDGs) are to be achieved by 2015. Within this time frame, the goals aim at halving extreme poverty and hunger, achieving universal primary education and ensuring environmental sustainability, among others. Implementation of MGD goal on combating poverty may lead to increased utilisation of natural capital including forests. This may result in deforestation and degradation.

Thus, Tanzania’s efforts in environmental management are supposed to contribute to implementation of her regional and international obligations in this area.
CHAPTER TWO

MAIN SECTORAL PROBLEMS AND OPPORTUNITIES

The forest sector is vested with the responsibility of managing the forest resources sustainably. The overall priorities and current constraints evolve around management of the country’s forest land resources at various levels for sustainable and progressive development, management of forest-based industries and other forest-based activities to contribute to the national development and equitable benefit sharing between stakeholders, conservation of the country’s unique ecosystems and biological diversity, considering the needs of local populations and appropriate management and utilisation methods and adaptation of the institutional framework and arrangement of the necessary human resources and financial inputs to meet the pre-conditions for the desired development.

2.1 Management of the country’s forest land resources for sustainable development

Tanzania Mainland has about 38.8 million hectares of forests and woodlands (FAO 2001). Out of this area, almost two thirds consists of woodlands on public lands which lack proper management. The general lands are under enormous pressure from expansion of agricultural activities, livestock grazing, fires, illegal harvesting and other human activities. About 13 million hectares of the total forest area have been gazetted as forest reserves. Over 80 000 hectares of the gazetted area are plantations and about 1.6 million hectares are under water catchment management. The forests offer habitat for wildlife, bees, unique natural ecosystems and genetic resources. They are also an important economic base for the country’s development. The forested area is distributed by type, use and legal status as shown in Table 2.1.

<table>
<thead>
<tr>
<th>Forest type</th>
<th>1 000 ha</th>
</tr>
</thead>
<tbody>
<tr>
<td>Forests (other than mangrove forests)</td>
<td>1 141</td>
</tr>
<tr>
<td>Mangrove forests</td>
<td>115</td>
</tr>
<tr>
<td>Woodlands</td>
<td>32 299</td>
</tr>
<tr>
<td>Total</td>
<td>33 555</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Use of forest land</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Production forest area</td>
<td>23 810</td>
</tr>
<tr>
<td>Protection forest area (mostly catchment areas)</td>
<td>9 745</td>
</tr>
<tr>
<td>Total</td>
<td>33 555</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Legal status</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Forest reserves</td>
<td>12 517</td>
</tr>
<tr>
<td>Forest/woodlands within national parks, etc.</td>
<td>2 000</td>
</tr>
<tr>
<td>Non-reserved forest land</td>
<td>19 038</td>
</tr>
<tr>
<td>Total</td>
<td>33 555</td>
</tr>
</tbody>
</table>

Sources: FBD (2002)
The extent of forest resource is however outdated. Regular resource assessment has not been carried out due to inadequate financial resources. In this situation, management of the resource is not based on informed decisions.

Deforestation is estimated at 412, 200 between 2000 and 2005 (rainforests.mongabay.com/20Tanzania.htm). The main causes of deforestation are clearing for agriculture, overgrazing, wildfires, charcoal making and persistent reliance on wood fuel for energy and lack of efficient production and marketing, over-exploitation of wood resources, are some of the main causes of deforestation in Tanzania. Population growth, expanding need for industrial and residential sites, unemployment, search for farmland and general social economic needs of forest products may lead to increased deforestation and degradation in the next ten years. Provision of alternative livelihood in the rural areas and alternative energy source to biomass may have significant positive effect on environment.

Deforestation is taking place mainly in the unreserved forest land (general land). Since the villagisation programme the government started allocating some of the general land to registered villages with the aim that land titles to villages or individuals would alleviate deforestation. Due to inadequate resources to implement active and sustainable forest management, deforestation through encroachment and over-utilisation has also been taking place in forest reserves which are under the jurisdiction of the central or local governments.

Climate change may adversely affect forests and the environment in general. Under climate change most of the forests across Tanzania are projected to shift towards drier regimes. Projections show that around the country, there will be changes in forest type, species and distribution as CO₂ in the atmosphere doubles (Agrawala et al 2003) . Different vegetation types will experience changes as a result of temperature and precipitation variation.

2.2 Management of forest-based industries and other forest-based activities

The value of the Tanzania’s forests is high due to the high potential for royalty collection, exports, and tourism earnings as well as the recycling and fixing of carbon dioxide, provision of other ecosystem services such as water and conservation of globally important biodiversity. The total annual economic value of forest goods alone is equivalent to 11% of GDP based on 2006 estimates while the total annual value of goods and services of forests is equivalent to 20.1% of GDP (URT 2008). Due to the inadequate management of the forests and related resources, the actual contribution of the forest sector to the national economy is underdeveloped. In 2007 for example, it was estimated that the sector and hunting contributed about 3% of the Gross Domestic Product (GDP) (URT 2008). The sector’s contribution to the economy is increasing at a very fast rate due to increasing demand for forest goods and services and macroeconomic changes, globalization and persistent reliance on wood fuel. However, the national accounts do not indicate the sector’s contribution separately, it is merged with hunting. The contribution is also underestimated because of the unrecorded consumption of wood fuels, bee products, catchment and environmental values and other forest products, such as poles. The estimated per capita consumption of wood fuels is 1 cubic meter round wood per annum.
Bioenergy is the main source of fuel for the rural population and accounts for about 90% of the total energy consumption in the country.

The sector also provides about 3 million person-years (URT 2008) of employment. Employment is provided through forest industries, forest plantations, government forest administration and self-employment in forest related activities. The real contribution is underestimated due to unrecorded labour in the collection of wood fuels and other forest-based products consumed by households.

The wood industry accounts for about half of the sector's recorded contribution to GDP. The other half is contributed by non-wood products and services. Forest industry is facing various problems, such as obsolete machinery, low working capital, unreliable electricity supply, weak managerial and technical skills as well as low business culture. Export of forest products has increased markedly in recent years. A large proportion of exports is in the form of raw or semi finished products due to weak integration in wood harvesting and processing, low capacity and low investment in efficient technology to process wood products in Tanzania.

Tanzania has a huge potential for non-wood forest products. The most important are tourism, game, bee products; especially honey and beeswax, tannins and gum arabic. The bulk of the non-wood products however, remain undeveloped. The management and utilisation of these resources could be developed through multi-purpose forest management, local processing and improved marketing.

Real GDP is projected to increase to 9.2 % by 2011. An increase in GDP growth may lead to decrease in forest cover (MNRT 2008). Increase in GDP is achieved through more use of resources including forest resources. Growth in GDP may lead to more demand for forest products as raw materials, energy sources, construction materials and source of financing other business through trade. A decrease in forest cover will impact adversely on the environment including loss of biodiversity, land degradation (soil erosion and loss of soil fertility) and alteration of local climatic and hydrological conditions.

Therefore, to ensure that the environment is not harmed by an increase in GDP resulting from implementation of Vision 2025 and Mini-Tiger 2020, there is need to balance economic growth with environmental conservation.

### 2.3 Conservation of the country’s unique ecosystems and biological diversity

About a quarter of Tanzania’s land area is covered by unique ecosystems in the form of forest reserves, national parks and game reserves. The country is famous for its rich variety and abundance of wildlife, particularly big game. Tourism is one of the biggest export earning industries in the country and accounts for about 16% of GDP and nearly 25% of the total exports. Forest-based eco-tourism has however not been developed to its full potential.

The country has an unusually rich variety of ecosystems of economic, scientific and aesthetic value. The outstanding ones are the Eastern Arc Mountains which have a high level of endemism. Other ecosystems include other mountain ecosystems, coastal forest patches, mangroves and wetlands. Most of them have important genetic resources for medicinal plants, timber tree species and other plants of economic importance. Forests contribute to agricultural stability by regulating water balances and protecting the soil.
Catchment forests in the country are important sources of water for domestic and industrial use and for generation of electricity. The ecosystems are however threatened by a variety of human activities, including heavy pressure for agricultural expansion, livestock grazing, wild fires, mining and over-exploitation of wood resources. These activities have caused deterioration of ecosystems and soil fertility, reduced water flows and loss of biological diversity.

Effective conservation of ecosystems has been impaired by the lack of sufficient coordination between the sectors concerned. There are efforts to establish new conservation areas, such as nature reserves but shortage of funds for compensating the dwellers, and land shortage is a challenge.

2.4 Adaptation of the institutional framework and arrangement of the necessary human resources and financial inputs

The implementation and administration of environmental programmes require collaboration and coordination across various sectors related to land use. There is no effective mechanism or framework for enhancing intersectoral coordination. The sectoral policies that require effective coordination include agriculture, wildlife, environment, land development, water, energy and minerals.

For over two decades, the public sector dominated the country’s economy. Since 1986, the country’s macro-economic policies have changed towards a market economy and an active involvement of the private sector. The country has undergone structural adjustments and sectoral reforms to open the economy through trade liberalisation. Investments in forestry programmes require a long time to generate returns. Financial mechanisms in place do not effectively promote long-term investment by the private sector.

The government budget on forestry has consistently been less than 1% of the total national budget. Other sources of funding include the private sector and external donors. For the last three years, donor contribution to forestry projects and related activities has been about 60% of the total sectoral funding. During the period, government contribution has averaged 39%. This trend is contrary to the 30% contribution from donors envisaged by the Tanzania Forestry Action Plan (TFAP). Contribution from the private sector, NGOs and individuals envisaged in TFAP was 37%. However, the contribution of the private sector, NGOs and individuals has been captured adequately. TFAP was approved by government in 1989 and provided the basis for the development of the forest sector. It was revised between 1992 and 1994 to take into consideration the assessment of policy related issues as a result of macro and socio-economic policy reforms implemented in the country then.
CHAPTER THREE
SECTORAL GOAL AND OBJECTIVES

3.1 Goal

The overall goal of the national forest policy is to enhance the contribution of the forest sector to the sustainable development of Tanzania and the conservation and management of her natural resources for the benefit of present and future generations.

3.2 Objectives

The objectives of the forest sector on the basis of the overall goal are:

(i) Ensured sustainable supply of forest products and services by maintaining sufficient forest area under effective and economical management;

(ii) Increased employment and foreign exchange earnings through sustainable forest-based industrial development and trade;

(iii) Ensured ecosystem stability through conservation of forest biodiversity, water catchments and soil fertility;

(iv) Enhanced national capacity to manage and develop the forest sector in collaboration with other stakeholders.

Based on the above objectives the four policy areas are:

(i) Forest land management;

(ii) Forest-based industries and products;

(iii) Ecosystem conservation and management; and

(iv) Institutions and human resources.

In each area the relevant policy issues are discussed and policy statements given, followed by a description of the main policy instruments and directives to be applied.
CHAPTER FOUR

POLICY AREAS AND STATEMENTS

4.1 Forest Land Management

OBJECTIVE: Ensured sustainable supply of forest products and services by maintaining sufficient forest area under effective management

4.1.1 National and local government forest reserves

This policy area deals with the management of national and local government forest reserves including natural forests and industrial plantations. The core problem is the low capability of the government institutions to manage these resources to meet the growing demands for forest products and services. As a consequence, the forests cover is being reduced due to the prevailing trends of forest destruction and degradation as well as the unsustainable conversion of forests to other land-use.

Government forest reserves are constantly threatened by encroachment and shifting cultivation resulting from a high population pressure. Population growth, expanding need for industrial and residential sites, lack of employment, search for farmland and general social economic needs of forest products may lead to deforestation and degradation in the next ten years. Wild fires are taking place annually affecting both natural forests and plantations. Lack of systematic management, unclear boundaries and inadequate resources for effective control have led to illegal felling of trees. Economic and environmental values of the forests are not internalised in product pricing and royalties do not reflect true economic values.

Currently, Participatory Forest Management (PFM) is taking place around the country as a way to improve management of forest resources. There are two approaches to PFM. These are CBFM and JFM. JFM takes place on reserved land owned and managed by either the central or local government. In this approach, villagers enter into management agreements to share responsibilities for the management with the forest owner. It is estimated that a total of 1,612,246 ha of forests (mostly montane and mangrove forests) are covered by JFM management plans (MNRT 2006). This represents 11.6% of the forest area under central and local government. CBFM and JFM have led to improvements in forest condition including regeneration, increased water flow and reduced illegal activities such as encroachment and illegal harvesting.

However, there are no guidelines in place to guide benefit sharing in JFM. This is a disincentive to communities. There is need to finalise and operationalise JFM guidelines in order to motivate forest adjacent communities;

Further, in order to improve service delivery in the forest sector and therefore improve forest resources management, preparations for the establishment of Tanzania Forest Service (TFS) as an executive agency have been completed but the agency is yet to be operationalised.

Introduction of self financing mechanism through Logging and Miscellaneous Deposit Account (LMDA) under retention scheme in all plantations has brought about
improvements in management of plantations. However, some of them are still facing a backlog of silvicultural operations because of inadequacy of funds. Forest management plans have not been adequately updated and, as a consequence, silvicultural operations and regeneration have not been implemented as required, resulting in uneven age-distribution of the plantation stands and reduced growing stock.

Policy statement (1): To ensure sustainable supply of forest products and services and environmental conservation, all types of forest reserves will be managed based on sustainable management objectives defined for each type. The management of all types of forest reserves will be based on forest management plans.

Policy statement (2): To ensure efficiency in forest management and conservation, national forest reserves will be managed by one or several specialised executive agencies or by private actors. Forest reserves under local governments will remain under their management or may be managed by specialised executive agencies or by the private sector.

Policy statement (3): To enable participation of all stakeholders in forest management and conservation, joint management agreements with appropriate user rights and benefits, will be established. The agreements will be between the central government, specialised executive agencies, private actors or local government, as appropriate in each case, and organised local communities or other organisations of people living adjacent to the forest.

Policy statement (4): To enable sustainable management of industrial plantations, one or several specialised executive agencies or private actors will manage these plantations on a fully commercial basis through lease, concession or joint management agreements.

DIRECTIONS

To ensure sustainable supply of forest products and services and environmental conservation, all types of forest reserves will be managed for production and/or protection based on sustainable management objectives defined for each reserve. The management of all types of forest reserves will be based on forest management plans. The boundaries of all central and local government forest reserves will be demarcated on the ground, their management objectives defined, and multi-purpose forest management plans prepared based on reliable inventory data and covering all different uses of forests.

To achieve more efficient management of national forest reserves including industrial plantations, management responsibilities will be delegated from the forest authorities to one or several executive agencies created for this purpose. The aim of the agencies is to develop and manage forest resources sustainably, in order to deliver sufficient and quality goods and services to meet local and international social, economic and environmental needs. Their establishment will be speeded up.

Forest reserves of national strategic importance, such as critical watershed areas and forest areas with high biodiversity or endemism may remain under management of the central government. However, the long-term goal is to delegate the management of these reserves to executive agencies when they have developed sufficient and proven capacity.
Concessions or leases of forest reserves to private actors will be promoted. The sector will be entitled to operate in the forests in accordance with forest management plans based on the principle of sustainable forest management.

The capacity of the forest authorities to monitor forest operations undertaken by private actors and/or executive agencies will be strengthened. Protective buffer zones around gazetted forest reserves will be demarcated in collaboration with local communities. The purpose of the zones is to protect the respective reserve and provide benefits for local communities and they will be managed in accordance with management plans.

In order to improve forest conservation and management and to ensure equitable sharing of benefits amongst all stakeholders, joint management agreements between the central government, specialised executive agencies, private sector or local governments, as appropriate in each case, and organised local communities or other organisations of people living adjacent to the forest, will be promoted. The local communities will be granted appropriate user rights for forest produce and forests will be managed in accordance with approved management plans. Also, LMDA will be introduced in the management of natural forests in order to improve management.

4.1.2 Forests on general lands

The forests on general lands, i.e. open access forest areas, are subject to conversion to other land uses such as shifting cultivation and also suffer from repeated forest fires. In the absence of security of tenure or formal user rights over these forest resources, there has been little incentive for their systematic and sustainable management. Uncontrolled grazing and wildfires are hampering natural regeneration resulting in eventual deforestation and loss of biodiversity.

As a measure to improve management of forests on general lands, the current policy advocates for participation of other stakeholders, including communities in the management of these forests. The communities are participating through Participatory Forest Management (PFM). PFM through CBFM being implemented in the country and is reported to bring about improved forest governance and condition. A total of 2,060,608 ha of forests are under CBFM (MNRT 2006). Forests under PFM have potential for carbon trade as well as other forests since they contribute to carbon sequestration and therefore mitigation of climate change. CBFM is taking place mainly in forests on village lands and general lands.

Policy statement (5): To enable sustainable management of forests on general lands, clear ownership for all forests and trees on those lands will be defined. The allocation of forests and their management responsibility to villages, private individuals or to the government will be promoted. Central, local and village governments, groups and individuals may demarcate and establish new forest reserves in general lands.
DIRECTIONS

To reduce uncontrolled use of forests, allocation of forests on general lands to villages, private individuals and the government will continue to be promoted so as to have a defined owner. Accordingly, central, local and village governments may continue to demarcate and establish new forest reserves in general lands. Village institutions will be granted appropriate user rights as incentives for sustainable forest management including rights to indigenous trees. PFM approaches will be scaled up for improved forest governance and condition and mitigation of climate change.

4.1.3 Private and community forestry

Private and community forestry involve forestry on leasehold and village lands including farm forestry, natural forests on leasehold lands and traditional forest areas/trees. While the legal framework for the promotion of private and community-based forestry, including village forest reserves, is currently in place, shortage of land and unclear land and tree tenure, particularly for women, is hampering investments in forestry on private and village lands. Moreover, there is inadequate awareness on tree growing and sustainable forest management as well as lack of financial incentives for private and community forestry development.

There have been conflicting messages from different land-based extension services which create uncertainty amongst local communities whose preferences, for example of species for tree planting have not been sufficiently considered. This applies particularly in favouring timber species instead of fast growing firewood species preferred by women. Moreover, planting and management of native species has not been adequately promoted compared to planting of exotic species. The tradition of obtaining tree seedlings free of charge has also discouraged the establishment of private nurseries. By and large, farmers’ general knowledge on tree management is inadequate for establishment of agroforestry systems. Wood products from private farms have found limited markets due to free wood supply obtained illegally from general lands and, consequently, investment on tree growing has not been considered financially attractive.

In situ conservation approach to landscape restoration has shown success in some parts of the country and has led to improved vegetation cover including forests and environmental conservation. Further, there are no major afforestation and reforestation initiatives in the country aimed at landscape restoration. There are many degraded areas in Tanzania.

Recent developments indicate that there is uncontrolled investment in large scale biofuel production in Tanzania. This is causing environmental degradation through forest clearing particularly on village lands.

Policy statement (6): Village land forest reserves will be managed by village councils. The forests will be managed based on sustainable management objectives defined in management plans for each forest.
Policy statement (7): Private and community forestry activities will be supported through harmonised extension service and financial incentives. Extension packages and incentives will be designed in a gender sensitive manner.

DIRECTIONS

Establishment of village land forest reserves will take cognizance of land policy. The reserves will be demarcated on the ground, management objectives defined, and multi-purpose forest management plans prepared covering all different uses of forests.

Gender-specific and farmer-to-farmer extension advice as well as financial incentives will be provided for the establishment of forest plantations on farmlands. Plantations of multipurpose trees with good growth will be promoted. Establishment of private nurseries will be promoted through intensified extension and appropriate credit systems. Extension on agroforestry practices will be gender sensitive and women’s preferences for species will be given due consideration. Support in forest management planning and implementation, intensified and harmonised extension as well as financial incentives will be provided to promote sustainable forest management of private and community forests including village forest reserves.

In situ conservation approach to landscape restoration will be scaled up in order to improve vegetation cover including forests and environmental conservation.

In the special cases of natural high forests on leasehold lands, conservation agreements between owners and the government will be promoted and management plans with due consideration of biodiversity management prepared. Existing traditional forests with established indigenous management systems will be protected from any disturbance and establishment of new traditional forests will be encouraged. Collaboration with other sectors, particularly energy sector will be promoted to develop policies to guide investment in large biofuel production so that it does not harm the environment.

4.2 Forest-based industry and products & trade

OBJECTIVE: Increased employment and foreign exchange earnings through sustainable forest-based industrial development and trade.

4.2.1 Wood-based industry and products

The wood-based industry comprises mechanical and chemical wood industry, while products include sawn wood, poles, wood fuel and artisanal wood-based products. The core problem is the industry’s current insignificant contribution to the national development in terms of products, export earnings and employment. Export of forest products has increased markedly in recent years. A large proportion of exports is in form of raw or semi finished products due to weak integration in wood harvesting and processing, low capacity and low investment in efficient technology to process wood products in Tanzania.

The industry has failed to create adequate wood demand to stimulate primary forest production. Forest industry activities especially production of sawn timber can be witnessed in every region of Tanzania mainland. There is also a considerable number of operative joinery and furniture manufacturing companies in the country. The industry
obviously plays an important role in both urban and rural areas for the creation of employment and business development.

### 4.2.1.1 Mechanical and chemical wood industry

Inadequate information on raw material availability and insecure procurement have prevented the industries from operating at full capacity as well as discouraged any investments in the rehabilitation of infrastructure. Raw material supply from natural forests has been rapidly decreasing due to degrading resource base and increasing conservation requirements. Consequently, the use of this resource needs to be increasingly substituted by wood procurement from plantations. Industrial plantations have not been sustainably utilised due to non-existing or outdated management plans. The implementation of the existing plans has also been inefficient.

The existing plantations are not being managed efficiently and some silvicultural operations are neglected. As a result, the quality of the raw material has deteriorated accordingly. Moreover, poor transport and communication infrastructure as well as inaccessibility to and within the plantations has made all forest management and harvesting operations cumbersome to implement. The mills are usually located far from the actual resource base resulting in high harvesting and transport costs. The performance and efficiency of the forest industry plants is poor because of old or obsolete machinery and technology, low investment, poor financing and weak market development and inadequately trained staff. Moreover, the existing plants are mainly designed to process raw material from a relatively limited number of indigenous species. The industry’s raw material requirements are higher than the available supply from plantations.

**Policy statement (8):** National forest assessment and monitoring & evaluation for facilitating planning and informed decision making will be undertaken regularly. Rehabilitation of existing technology and establishment of efficient forest industries using appropriate technology and employment of adequately trained staff will be promoted.

**DIRECTIONS**

Information on the availability of raw material will be secured through periodical forest resource assessments and all relevant data will be provided to potential users. The supply of raw material will be improved by commercialising or privatising the management of existing industrial plantations through concessions and forest land leases. A favourable environment for the establishment of new forest industries will be promoted and facilitated through appropriate financial incentives. The use of appropriate technology and trained staff in forest harvesting and wood processing will be promoted through training and extension. Establishment of forest industry will be matched with available raw material. In order to increase efficiency forest industry operators will be required to employ trained staff and use appropriate technology. Integration in the forest sector and with industries that use wood will be promoted in order to minimise waste. Further, forest industry operators will be required to undertake value-addition to enable the country reap maximum benefits from its exported forest products.
4.2.1.2 Woodfuel
Woodfuel is the main source of energy both in rural and urban areas. About 90% the total energy used in Tanzania is from wood. Wood fuel, especially charcoal, is also an important source of livelihood for rural communities. Wood fuel consumption will continue to increase with increasing population due to unavailability of appropriate alternative affordable sources of energy. Lack of affordable alternative sources of energy has contributed to the degradation of natural forests due to practically uncontrolled harvesting of woodfuel. Efficient wood conversion technology and methods are currently scarce. A significant amount of material suitable for wood fuel is also wasted as coordination between the logging companies and wood fuel suppliers is non-existent.

Policy statement (9): Establishment of private woodlots and plantations for woodfuel production will be encouraged and supported through research, extension services and financial incentives.

DIRECTIONS
Private individuals will be encouraged to establish woodlots in their farms through research and extension as well as through financial incentives. Dissemination of information on appropriate technology for woodfuel production and use will be enhanced. Private investment in establishing woodfuel plantations will be promoted by introducing appropriate credit systems. In order to reduce overdependence on woodfuel, the use of alternative affordable sources of energy and energy saving technologies will be promoted through research and extension. Provision of alternative livelihood to charcoal production and sale in the rural areas will be promoted so as to minimise environment damage.

4.2.1.3 Artisanal wood-based industry and products
There are a number of entrepreneurs engaged in production of artisanal wood products, especially carvings. However, the operations of these entrepreneurs are suffering from inadequate information on raw material and its availability. Moreover, the resource base for these products is narrow. The dominant species currently are muhuhu (Brachylaena huilensis), Mnazi (Cocos nucifera) and mpingo (Dalbergia melanoxylon). The existing technology is wasteful and unsuitable for mass production. Poor marketing skills and systems as well as the current narrow range of products have negatively affected the business. Wood carving skills are also likely to decline in the future due to lack of opportunities for sustainable skill development in this area.

Policy statement (10): Improvement in the manufacturing of artisanal wood-based products will be encouraged through resource information and promotion of other suitable lesser-used species, training and extension services as well as research and product development.

DIRECTIONS
The artisanal wood-based products have favourable market prospects likely to result from expansion of the tourism industry and exports. Resource data on lesser-used species suitable for artisanal products will be derived from forest inventories
and information on the resource base made available to potential users. Specific tree species particularly suitable for wood carving will be identified and conserved. Research, training and transfer of conversion technology on artisanal wood products will be strengthened. Research for widening of product range and on the suitability of lesser-used tree species will be intensified. Marketing strategies for artisanal wood-based products will be developed.

4.2.2 Beekeeping

Beekeeping is the principal industry dealing with management of bees in natural forests, plantations, agricultural land and other habitats and processing of bee products. Beekeeping has a major role in improving livelihoods. Main beekeeping products include honey, beeswax, royal jelly, propolis, and pollination services. It is also an eco-rehabilitative agro-based non-polluting activity which improves pollination of various cultivated and non-cultivated plants, thereby bringing about improved quality and quantity of fruits and other crops and alleviating rural poverty. Pollination also contributes to biodiversity conservation.

Policy statement (11): Beekeeping will be incorporated in the management plans of forest reserves.

DIRECTIONS

Beekeeping will be incorporated in the management plans of forest reserves in the context of joint forest management. This may include setting aside suitable habitats for beekeeping activities in forest reserves. Beekeeping activities will be promoted for local communities and other stakeholders through joint management agreements. Coordination with the agricultural sector will be strengthened in order to promote integrated pest management for conservation of bees.

4.2.3 Eco-tourism

Development of eco-tourism is a potential source of income for forest owners and communities in the rural areas adjacent to natural forests. The existing wildlife based tourism and related marketing services form a sound basis for the development activities. The full potential of forest-based eco-tourism has not been assessed adequately. Poor infrastructure in the rural areas is one of the main obstacles to the development of eco-tourism. Specific marketing services for other than wildlife tourism are also low at present.

Policy statement (12): Development of forest-based eco-tourism with participation of stakeholders, particularly private sector and communities will be encouraged. This will be linked with tourism development.

DIRECTIONS

The potential of eco-tourism will be assessed and suitable types of forest areas identified. Private sector and community involvement in developing eco-tourism products and services, such as lodges, trails and guided tours, will be promoted.
Linkages and cooperation with other sectors involved in wildlife based tourism development will be promoted.

4.2.4 Other non-wood-based industry and products

The main non-wood forest products include gums, resins, bark, tannin, aromatics, latex, natural dyes, fruit and nuts, fibre, spices, bamboo, raffia, rattan and medicinal plants. Decline of the natural forest cover and over-harvesting of some tree species have contributed to the reduction of the resource base. Poor market information and undeveloped marketing channels have hampered the development of the industry. Moreover, further processing to value-added products is almost non-existent. Skills of the artisans operating the industry are likely to decline in the long run due to inadequate transfer of knowledge from one generation to another.

Policy statement (13): Investments in non-wood forest products industry will be encouraged, and marketing strategies will be developed in order to utilise the full potential of the products. Products with high demand will be domesticated in order to increase their supply.

DIRECTIONS

Resource assessment of non-wood forest products will be incorporated in forest inventories and resource assessments for forest management planning. Private sector investments in these products will be promoted in order to utilise the full potential as well as to domesticate and commercialise products with high demand in order to increase their supply. Research, training and product development programmes will be strengthened in the existing forest research and training institutions. Information on potential markets will be produced and efficient marketing channels developed. Awareness raising on the products and markets will be intensified.

4.2.5 Trade in forest products

Trade in wood and non-wood forest products offers considerable potential for increased economic development through income and employment generation as well as export earnings. In some cases, international agreements require trade in certain forest products to be regulated. Unregulated trade can instigate uncontrolled exploitation and has the potential of accelerating forest destruction and degradation through loss of biodiversity. Demand for forest goods and services in the country is increasing and outpacing existing institutional capacities, resulting in illegal internal and export trade in forest goods.

While export of forest products generates foreign exchange for Tanzania and enhances the sector's contribution to the economy, an increase in exports may have potential adverse effects on the forest condition which may result from possible over harvesting;

Policy statement (14): Domestic and international trade in forest produce will be promoted. Trade of some forest products may be controlled.
DIRECTIONS
To enable free trade of forest produce in the long-term without causing destruction of the resource base, an enabling regulatory environment for sustainable forest management practices will be created through a number of measures incorporated in this policy. The most important of the instruments for sustainable forest management are forest management plans and monitoring systems for their implementation. Internal trade will be promoted and export of roundwood and charcoal will continue to be banned. The introduction of mechanism for sustainable forest management through national, regional or global initiatives will be supported. Private sector initiatives will also be encouraged in this respect. In order to improve control on illegal harvesting, District Forest Harvesting Committees will be strengthened in all districts with harvestable natural forests.

4.3 Ecosystem conservation and management

OBJECTIVE: Ensured ecosystem stability through conservation of forest biodiversity, water catchments and soil fertility.

4.3.1 Forest biodiversity conservation

Forest biodiversity comprises biological diversity at the ecosystem, species and genetic levels. The current encroachment and shifting cultivation taking place in forested areas are reducing the natural forest cover and forest biodiversity. Moreover, repeated wildfires are hampering the regeneration of all types of forests. Lack of systematic forest management as well as inadequate infrastructure and staff to control illicit felling have further contributed to loss of biodiversity. Some forest resources are transboundary. Currently, there are no clear mechanisms for managing such resources.

Inadequate baseline data on biodiversity and a low level of awareness on environmental and economic values of indigenous forests have been some of the main causes for the negligence of forest conservation. The current forest management plans have not considered biodiversity management or multiple-use aspects of forestry adequately. Furthermore, values such as lost biodiversity have not been articulated adequately.

4.3.1.1 Natural protection forests

Policy statement (15): New forest reserves for biodiversity conservation will be established in areas with high biodiversity value. Forest reserves with protection objectives of national strategic importance will be gazetted as nature reserves.

Policy statement (16): Biodiversity conservation and management will be included in the management plans of all protection forests. Involvement of local communities and other stakeholders in biodiversity conservation and management will be encouraged through joint management agreements.

Policy statement (17): In order to improve biodiversity conservation and management, biodiversity research and information dissemination will be strengthened.
DIRECTIONS

New forest reserves will be identified and established in areas of high biodiversity value in consultation with other stakeholders. The status of existing forest reserves with high biodiversity value will be upgraded to nature reserves to ensure their protection in perpetuity. Conservation and management objectives for each forest reserve and nature reserve will be defined and management plans prepared. Local communities and other stakeholder involvement in the conservation and management of such reserves will be promoted through joint management agreements between the parties involved. Buffer zones around reserved areas and corridors to link fragmented forests will be established in collaboration with the local people. In-situ and ex-situ conservation programmes including gene banks for threatened species will be established. Biodiversity research and information dissemination will be strengthened. Regional cooperation will be strengthened in order to ensure sustainable management of transboundary forest resources.

4.3.1.2 Natural production forests and plantations

Policy statement (18): Biodiversity conservation will be incorporated in the management plans of natural production forests and plantations. Biodiversity conservation and management guidelines will be incorporated in the plans. The replacement of natural forests by exotic plantations will be minimised.

DIRECTIONS

Principles of multiple-use forest inventories will be developed and biodiversity conservation and management guidelines incorporated in the management plans for natural production forests and plantations. Management guidelines for natural forests will be reviewed regularly and their replacement by exotic plantations minimised. Establishment of monoculture plantations will be minimised by promoting stands of mixed species. Biodiversity management and landscaping principles will be incorporated in the management regimes of plantation forests. Management and monitoring of biodiversity will be further incorporated in the practical forest operations when implementing the plans.

4.3.2 Watershed management and soil conservation

Sustainability of water sources is one of the key prerequisites for local and national development. Population pressure and inefficient forest management and protection have contributed to the deterioration of catchment forest areas causing water shortages. Poor species selection and illegal logging combined with inappropriate logging methods have further reduced the quantity and quality of water as well as created sedimentation and caused flooding. Cultivation in riverbanks has caused erosion and siltation. The value of water is not internalised in the pricing of forest products.

Policy statement (19): New catchment forest reserves for watershed management and soil conservation will be established in critical watershed areas.

Policy statement (20): Watershed management and soil conservation will be included in management plans of all protection and production forests. Involvement of local
communities and other stakeholders in watershed management and soil conservation will be encouraged through joint management agreements.

Policy statement (21): Research and information dissemination will be strengthened in order to improve watershed management and soil conservation.

DIRECTIONS

The most important watershed areas will be identified and new catchment forest reserves established in areas with high watershed value. Management objectives for each catchment forest area will be defined and management plans prepared. Specific provisions will be included for the protection of water sources such as rivers, streams, wells and wetlands. Local communities and other stakeholder involvement will be encouraged in the establishment and management of buffer zones as well as in the overall catchment forest protection through joint management agreements. The establishment of water conservation funds will be promoted. Coordination between the forest authorities and other institutions involved in watershed protection will be strengthened.

Information and awareness on the value of forests in the protection of water sources will be enhanced through research, training and extension. Watershed management guidelines will be prepared and incorporated in forest management planning (riverine zones, steep slopes, alignment of road network, etc.). Selection of appropriate species for watershed protection will be emphasised in plantations.

4.3.3 Wildlife

Forests provide habitat for wildlife. Encroachment, wildfires, illegal logging and poaching in reserved forests have contributed to the deterioration of the wildlife population in forests. Baseline data on wildlife species and their habitats outside game reserves and national parks is scarce and wildlife management is not incorporated in forest management plans. Coordination between the government institutions involved in wildlife and forest management is weak. Some forest reserves overlap with game reserves or game controlled areas, causing conflicts in management activities. Inadequate infrastructure and financing within wildlife and forest sectors have further exacerbated the situation.

Overgrazing is a prominent problem in general forest lands and impacts negatively on the living conditions and survival of the wildlife population. Damage caused by wildlife on property, agricultural crops, livestock and even human lives creates conflicts of interest between wildlife conservation and the rural population. The level of awareness of local communities on the need for sustainable wildlife management is low.

Policy statement (22): Management of all types of forest reserves will incorporate wildlife conservation.

DIRECTIONS

Resource assessment of wildlife in forest reserves will be undertaken and wildlife component incorporated in the forest management plans. The component may include setting aside corridors, grasslands, wetlands, etc. so as to ensure habitats
for different types of wildlife. Participation of local communities and other stakeholders in wildlife conservation will be promoted through joint management agreements between all relevant parties. Coordination between the forest and wildlife authorities will be improved to ensure sustainable management of wildlife inside forest reserves and resolution of conflicts arising from overlapping forest and game reserves or game controlled areas or national parks.

### 4.3.4 Environmental impact assessment

Various types of investment projects in forest areas may cause adverse environmental impacts. Currently, for example there is increasing investment in biofuel production in Tanzania. Large scale biofuel production requires big areas of land. Large scale biofuel production seriously threatens the environment through land clearing to accommodate energy crop plantations which result in loss, fragmentation and degradation of valuable habitats (especially grasslands, forests, wetlands and extensive agricultural areas) and negative impacts on associated biodiversity and ecosystem services.

Environmental Impact Assessment (EIA) must, therefore, be incorporated in the planning and decision-making process in order to ensure beforehand that unnecessary damage to the environment is avoided and possible mitigation measures are identified.

*Policy statement (23): Environmental impact assessment will be required for investments which convert forest land to other land use or may cause damage to the forest environment.*

**DIRECTIONS**

The potential damage to the forest environment may be caused by development activities such as forest industries, large scale biofuel production, road construction, agriculture, dams, settlements, shrimp farming and tourism. Environmental impact assessment will be required before investments are undertaken in forest areas. Definition of the scope and guidelines for EIA for the forest sector will be prepared in collaboration with other sectors and stakeholders.

### 4.4 Institutions and human resources

**OBJECTIVE:** Enhanced national capacity to manage and develop the forest sector in collaboration with other stakeholders

#### 4.4.1 Framework for forest policy, planning and coordination

The National Forest Policy of 1998 has been in place for ten years now. In 2001, the National Forest Programme (NFP) was endorsed as a strategic planning framework for the implementation of the policy and operationalising commitments and obligations related to forestry derived from international agreements and intergovernmental processes. Since the approval of the policy and endorsement of NFP a number of programmes and projects have been implemented towards achieving policy objectives. The programmes and projects were relevant to the policy objectives and its strategies. The interventions also had linkages with other related national policies and strategies. However, there have been
limited interventions related to good governance and accountability and afforestation and reforestation.

Best practices resulting from implementation of various programmes and projects have however not been documented adequately. Adequate documentation of best practices is an important prerequisite for scaling up.

There has been weak coordination and communication between MNRT and PMO-RALG. Therefore, in the process of implementing programmes and projects, there have been duplication and conflict of roles between MNRT and PMO-RALG staff. Further, the Coordination and communication between MNRT and PMO-RALG on the one hand and NGOs/CSOs and private sector is also weak.

Policy statement (24): The policy analysis, review and planning capacity within the forest sector will be strengthened with emphasis on strategic planning and coordination. The forest policy will be revised periodically to take into account changes in national macroeconomic policies and emerging regional and international issues relating to forestry development. A broad based stakeholders’ consultative committee to guide policy-related cross-sectoral issues will be strengthened.

DIRECTIONS

Programme and planning coordination functions within the forest administration will be strengthened in order to improve policy analysis and strategic planning within the administration. A suitable stakeholders’ consultative committee to advise the sectoral administration and promote cross-sectoral coordination will also be strengthened. The forest policy and the National Forest Programme (NFP) which guides policy implementation will be reviewed periodically. The National Forest Policy reviews will take into consideration the contribution of programmes/projects implemented by other stakeholders including government institutions, NGOs/CSOs and the private sector.

Further, monitoring and evaluation of implementation of policy will be strengthened and best practices will be documented for scaling up. The contribution of programmes/projects implemented by other stakeholders including Government institutions, NGOs/CSOs and the private sector will be taken into account in the National Forest Policy reviews. Coordination and communication between the forest administration and PMO-RALG, NGOs/CSOs and private sector will be strengthened to ensure that programme/projects formulated by all stakeholders address policy objectives and sector programme. Collaboration and coordination between the forest administration and PMO-RALG will be strengthened in order to avoid conflicts and duplication of effort.

4.4.2 Legal and regulatory framework

The Forest Act No 14 of 2002 (CAP 323 of 2002) generally conforms to the National Forest Policy since most of the policy statements have been translated into law.

The current forest legislation does not provide for strong sanctions to deter repeated offences. Policies related to wildlife, land use and tenure and creation of an environment policy has been done. Supporting legislation has also been completed. There is lack of
coordination in formulating by-laws between the central and district levels as well as between the relevant sectors. Some by-laws established by local governments have turned out to be contradictory to the principal laws. Guidelines for active and sustainable forest management through JFM are not in place and royalties and other license fees collected by the government are based on administrative pricing and do not reflect their economic values.

Policy statement (25): Legislation of the forest sector will be periodically updated and harmonised with the legislation on environmental management and other related sectors.

Policy statement (26): National criteria and indicators for sustainable forest management will be reviewed. Management guidelines for different forest types will be reviewed periodically on the basis of these criteria and indicators, and management plans for all types of forest reserves prepared accordingly.

Policy statement (27): Royalties and other fees for forest products and services will be determined to reflect their economic value. Revenue collection will be made more effective.

Policy statement (28): Pricing of forest products and services sold from central and local government reserves will be determined based on free market value.

DIRECTIONS

Revision of forest legislation will follow the approved policy and will be harmonised with the legislation of related sectors. All Policy objectives will be reflected in the legislation and all statements will be translated into law. Deterrent punishment will be prescribed for offences committed against the legislation. The legislation will ban forest officers and other people involved in decision making in forestry from involvement in forest trade.

National criteria and indicators for sustainable forest management will be reviewed. Management guidelines for different forest types will be reviewed based on these criteria and indicators. Management plans for all types of forest reserves will be prepared. The capacity of the sectoral administration to monitor the implementation of the plans will be strengthened through establishment of law enforcement units. Royalties and other fees collected by the government will be adjusted to reflect their economic value. Revenue collection will be strengthened and made more effective. Prices of forest products and services sold from central and local government reserves will be determined based on free market value. To ensure sustainable and economic utilization of the forests, taxes in addition to royalties will be introduced.

4.4.3 Forest administration

The sectoral administration, like other natural resources sectors, is operating under three parallel structures, namely the local governments, regional administration, and the ministry responsible for forestry. Weak links between the sectoral administration at the district and regional levels make coordination of activities difficult. Central government capacity to provide administrative and technical guidance is inadequate in terms of human resources,
finance and materials. Technical and professional staff are inadequate at all levels and self-financing revenue sources within the administration are narrow. Increasing demand for forest products in the country has outpaced the existing institutional capacities, leading to illegal internal and export trade in forest products.

Coordination with other relevant sectors is inadequate. Current information systems and databases do not provide sufficient information for decision making. Inadequate remuneration of civil servants has resulted in low work motivation. Due to scarce resources the law enforcement function of the sectoral administration is weak. There is also weakness in instituting good governance in forestry.

Policy statement (29): The role of the sectoral administration will focus on policy development, regulation, monitoring and facilitation. Decentralisation of forest resource management responsibilities will continue to be promoted and enhanced. Specialist technical and training backup services as well as information dissemination and sharing will be strengthened.

DIRECTIONS

The structures of the forest sector administration will be developed in accordance with the public sector and local government reforms. Links and coordination between the central and decentralised levels will be strengthened. Recruitment of specialists to the sectoral administration will be promoted. Forestry extension services will be strengthened. In order to ensure professional and technical competence of the personnel, in-service and further training programmes will be implemented. The capacity of the sectoral administration to provide legal, resource assessment and market information to regions, districts and other stakeholders will be strengthened and information sharing with other stakeholders intensified. In order to curb illegal forest utilisation, institutional capacity to monitor and administer the forest sector will be strengthened. Governance in the forest sector will also be strengthened to ensure sustainability of the resources. Forest guard cadre will be reintroduced to bolster protection of forests.

4.4.4 Local government

The technical capacity of the local government in forestry activities is weak. Funding for natural resources management at the district level is generally inadequate.

Policy statement (30): The capacity of local governments to administer and manage forest resources will be strengthened and a coordination mechanism between the local and central governments strengthened.

DIRECTIONS

The recruitment of qualified and competent forestry staff for local government will be emphasized and in-service training promoted. Sustainable direct and indirect uses of forests by local governments will be encouraged. Coordination and communication between central and local governments will be strengthened.
4.4.5 Other government institutions

The capacity of most government agencies responsible for management of natural resources related to forestry development to respond to future challenges is weak. Coordination between different government agencies involved in natural resources management and conservation which have impact on forestry is poor.

Policy statement (31): Cross-sectoral coordination between the forest administration and other government institutions at all levels will continue to be promoted.

DIRECTIONS

Cross-sectoral coordination on forest-related issues in environment and natural resources management and conservation at the central and decentralised levels will be promoted. Cross-sectoral collaboration and coordination in the formulation of relevant policies and action plans, based on identification of the roles of the various stakeholders, will be promoted. Collaboration and coordination will also be emphasised and promoted for the establishment of an integrated extension system for natural resources management including agriculture.

Formal sectoral coordination between fisheries and forestry authorities, particularly in the management of fisheries resources in forest reserves and will also be promoted. Cross-sectoral coordination when carrying out environmental impact assessments required for investments in forest areas will be promoted.

The forest authorities at national and local levels will work closely with other government institutions in order to curb illegal forest utilisation and improvement of revenue collection. The inter-ministerial coordination mechanism provided in the Environmental Management Act will be adopted.

4.4.6 Forestry research

National Forest Research Master Plan was prepared in 1991-92. However, research programmes in areas such as indigenous forest management and species have not been initiated as recommended. Also, little or no research on climate change and its impacts on forests & the environment and possible mitigation measures has been conducted. Inadequate human resource capacity and low priority in terms of funding and infrastructure development have hindered the implementation of all research programmes. Forestry research has not been demand-driven because of poor links between the research institutions and users.

Policy statement (32): Forestry research and development as the basis for sustainable development and management of the forest sector will be strengthened. Financial resources for problem-oriented research and development programmes will be provided through cost-sharing mechanisms and establishment of research funds.
DIRECTIONS

Forestry research and development priorities will be reviewed based on the demand-driven research principle. Research on the effects of climate change on forests and the environment in general and mitigation measures will be accorded high priority. The institution responsible for forestry research will be strengthened to enable it coordinate and regulate research effectively.

Research and development focusing on improved forest and tree management especially indigenous species will be promoted. Collaboration between the national research institutions will be promoted. Close linkages between the research institutions and users will be developed through information exchange, symposia and seminars and joint development of research plans. International and regional cooperation in forestry research will also be promoted.

4.4.7 Forestry training

Information on labour market for forestry is inadequate and a comprehensive manpower development and training plan has not been adequately updated. Professional and specialist training is inadequate. Practical aspects of training are weak and curricula do not provide sufficient possibilities for specialisation.

Policy statement (33): To ensure adequate technical and specialist staff in the sector, forestry training institutions will be strengthened. Specialist training will be promoted.

Policy statement (34): To facilitate manpower development, a regular demand-driven manpower needs assessment, curricula review will be conducted and training planning reviewed.

DIRECTIONS

To ensure adequate and competent professional and technical staff to manage the forest sector, sufficient resources will be provided to strengthen the existing forestry training institutions. A system for demand-driven regular manpower needs assessment, curricula review and training planning for the sector will be developed. International and regional cooperation in forestry training will be promoted. The links between the forest sector training institutions including vocational training centres and those of research and development on forestry will be promoted and sufficient financial resources provided through cost-sharing mechanisms and research funds. Due to inadequate funding the training institutions are under-utilised at present.

4.4.8 Extension services

A well-functioning extension service is a prerequisite for the promotion of community forestry. The extension service is, however, poorly staffed and fragmented as different forestry related sectors have their own services. These organisations do not have adequate human and financial resources, and extension messages delivered to farmers are sometimes conflicting as coordination between different services is weak. Multiple-use
forestry is not adequately addressed in the extension programmes. Inadequate extension materials and facilities are hampering extension work.

Policy statement (35): To ensure increased awareness and skills acquisition amongst the people on sustainable management of forest resources, forestry extension services will be strengthened.

Policy statement (36): Forestry related extension messages delivered by different natural resources management and other related actors will be harmonised through integrated planning, research and training.

DIRECTIONS
To ensure increased awareness and skills amongst the people on conservation, management and utilisation of forest resources, the capability of the forestry extension service will be strengthened. Extension efforts will be directed towards private and community forestry as well as joint forest management in the government forest reserves. In order to have efficient and effective extension service cross-sectoral coordination will be promoted. This will be achieved through integrated extension planning, increased input of forestry extension in other services through in-service-training of the extension staff, coordinated on-the-spot advice, farmer-to-farmer extension and other approaches as appropriate. The extension messages will be designed in a gender sensitive manner.

Forestry extension curriculum will be reviewed towards multiple-use forestry. Extension packages for different geographical areas and ecological zones will be developed in close collaboration with the respective users. Involvement of NGOs and other institutions in forestry extension activities through coordination, training and preparation of extension materials will be further promoted.

4.4.9 Non-Governmental Organizations and Community Based Organisations

Non-governmental organisations (NGOs) in the field of forestry provide a potentially effective channel to reach farmers and communities with extension advice and other incentives. However, some NGOs do not have the adequate capacity both in terms of human resources and materials. Inadequate financing is also hampering their activities. Inadequate coordination amongst NGOs has resulted in overlapping activities in some areas.

Policy statement (37): Coordination and cooperation between the forest sector and NGOs will be promoted in order to avoid overlap or duplication of interventions.

DIRECTIONS
Coordination between the forest sector and NGOs will be promoted. Establishment of NGOs in the field of forestry will be encouraged. NGO participation in the preparation of forest-related plans and programmes will also be encouraged. Moreover, NGOs will be encouraged to increase self-financing in order to ascertain their sustainability.
4.4.10 Private sector

The parastatal organisations in the field of forestry have been inefficient in terms of productivity and marketing of their products and have been privatised or liquidated. The private sector has taken a prominent role in the activities formerly undertaken by parastatals. However, private forestry enterprises are suffering from limited accessibility to credit for investments. The harvesting and processing activities are inefficient due to poor technology, obsolete equipment and lack of technical know-how. Insecure supply of suitable raw material and inadequate information on its availability have discouraged entrepreneurs from investing in the forest industry. Lack of organised marketing systems and channels have hampered sales of forest products.

Policy statement (38): An enabling environment and regulatory framework for private sector involvement in forestry will be created through secured raw material procurement, training, research and transfer of technology. Incentives and credit facilities for investments will be promoted.

DIRECTIONS

An enabling environment for private sector involvement in forestry will be created. This involves clear ownership and tenure rights, information on forest resources and raw material, financial incentives and credit facilities, improved access to markets and market pricing of products as well as effective training and extension. Cooperation between forest administration and relevant private sector associations will be facilitated. Reliable information to private industries on forest resource base and investment opportunities will be provided.

Regulatory framework enabling private investment including appropriate lease and concession arrangements will be developed. Establishment of joint ventures by the private sector will be encouraged. Credit systems and other financing mechanisms for forest industries will also be promoted. Opportunities will be provided to the private sector for training and transfer of technology.

4.4.11 Local communities

In many parts of Tanzania, local communities have the potential to ensure sustainable management of forest resources. However, lack of incentives for example in JFM may jeopardize sustainable forest management by local communities. Inadequate incentives for tree growing have resulted in poor motivation to plant and care for forests and trees. Low awareness on conservation needs and know-how on tree growing is common amongst local communities. Extension services have been unable to produce adequate information on forest management practices or marketing channels for forest products. Gender inequality in land tenure has prevented women from owning land and their involvement in formal decision making on resource management has been virtually non-existent despite the important role of women in forestry activities. Poor communication and infrastructure as well as ineffective communication channels with the government authorities have contributed to the poor state of forest management. Local level forestry by-laws and their enforcement mechanisms are not effective.
Policy statement (39): Local communities will continue be encouraged to participate in forestry activities. Clearly defined forest land and tree tenure rights will be instituted for the communities, including men and women.

DIRECTIONS

Clearly defined forest land and tree tenure rights for communities will be established. The establishment of village forest reserves, community-based organisations for joint forest management, exchange of information and awareness raising will be promoted. Local communities will be involved in forestry-related planning and decision making through promotion of participatory extension methods and approaches. Establishment and sustainable management of village forest reserves will be promoted. Communities will be granted rights to retain some revenue from accrued products and services derived from community-managed forests and all revenue from community owned forests. Forestry activities by local communities and farmers will be promoted through extension services, technical assistance and establishment of appropriate financial incentives. Involvement of women in forestry activities will be promoted.

4.4.12 Financing

The development of the forest sector has been dominated by a high dependence on donor and public financing, and sectoral self-financing mechanisms have remained undeveloped. Poor economy with high interest rates has also hampered domestic financing. Private sector financing has been low due to lack of appropriate financing mechanisms. Support from donors has been gradually declining during the past few years. Moreover, some existing international financing mechanisms, e.g. "debt-for-nature-swaps", have not been easy to adopt by the government due to its inability to raise enough local funds to meet the required conditions. The same applies also to the country's limited capacity to fulfil all international obligations; conventions and other agreements. In addition, some foreign aid programmes have not had in-built sustainability to allow the government to take over the activities when donor financing ceases. Currently there are initiatives on adopting payment for ecosystem services (PES). Ecosystem services include watershed protection, forest conservation, biodiversity conservation, carbon sequestration and landscape beauty in support of ecotourism. PES could be a direct incentive to encourage ecosystem management in ways that ensure the continued provision of the services. It is a highly promising conservation approach that can benefit buyers, sellers and improve the resource base.

Policy statement (40): New and innovative sectoral financing mechanisms will be developed and directed to key functions and stakeholders of the forest sector.

DIRECTIONS

The new policy is based on the establishment of self-financing structures, such as executive agencies and increased contribution by the private sector and local communities. National and local level financing mechanisms for private sector and local community investments in forestry activities will be developed. Public sector self-financing will also be intensified through full valuation of the resource use by
pricing products and services based on their respective economic values and through efficient collection of royalties and other fees.

Long-term financing arrangements for forestry research in collaboration with the international community will be developed. Commercialisation of some research activities will be promoted so as to increase self-financing. New mechanisms for cost-sharing in training by different users, and development of commercial activities by training institutions for increased self-financing will be promoted. Provision of training and education services at the regional level on a commercial basis on selected fields of specialty such as forest-based industries will be promoted. Cost-sharing mechanisms will also be promoted to improve the sustainability of the forestry extension services. NGOs will also be encouraged to undertake commercial activities for increased self-financing so as to ensure their sustainability.

Efficient use will be made of existing national financing, including public and private sources. The linking of donor funding to the national financing structures will be improved and donor assistance used to support private investment by creating an enabling environment. Systems for long-term external financing in the form of conservation and research funds or other similar arrangements will be developed for projects with global dimension such as conservation and research.

4.4.13 International community

Despite the significant role of international financing of Tanzania’s forest sector, there have been some disparities and differences among development partners and the government in areas of financing arrangements such as planning and budgeting, monitoring and evaluations, financial management requirements and coordination and management structures.

Policy statement (41): To ensure effective use of donor financing to the forest sector, alignment and harmonization with development partners in the context of overall sector programmes and projects management & coordination will be strengthened.

DIRECTIONS

An effective donor coordination system in the context of overall sectoral coordination and management will be maintained. Alignment and harmonization of donor supported forestry interventions with the government systems will be promoted.
CHAPTER FIVE

ROLES AND RESPONSIBILITIES OF MAIN STAKEHOLDERS

The forest sector has many stakeholders with different roles and responsibilities. The roles and responsibilities of main stakeholders are summarized in Table 5.1.
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