ZIMBABWE FORESTRY CODE PROPOSAL

JUNE 2006

CHAPTER 1: PREAMBLE

1 THE INTERNATIONAL FOREST POLICY DIALOGUE

The internal community has since 1992 been engaged in forest policy dialogue aimed at promoting sustainable management of all types of forests, in recognition of people's dependence on forests for socio-economic development and livelihoods. This international forestry dialogue was facilitated by the United Nations Commission on Sustainable Development (CSD) through the establishment of the Intergovernmental Panel on Forests (IPF) in 1995 and the Intergovernmental Forum on Forests (IFF) in 1997.

The IPF was given two 2 years (until 1997) to develop proposals for action and to build consensus within the international community on the need for a global forest convention. Many countries objected to the idea of a legally binding instrument until they had a better understanding of the financial mechanisms in place to facilitate national implementation particularly in the developing countries. The IFF was established at the 5th Session of the CSD in 1997 and given until 2000 to among other issues, promote and facilitate implementation of IPF proposals for action, report on progress towards sustainable forest management (SFM), identify possible elements and work towards a consensus on future international arrangements, including a legally binding instrument (LBI 0 Tc 0 Tw ( ) Tj -335.25 -14.2

- Foster international and cross-sectoral co-operation and monitor, assess and report progress in achieving SFM; and
- Strengthen political commitment to the management, conservation and

2. Promoting public participation in SFM and public awareness of the benefits from forests.
3. Combating deforestation and forest degradation including conducting studies on underlying causes of deforestation and creating awareness on the multiple values of forests.
4. Traditional forest-related knowledge, including protection of intellectual property rights and access and benefit sharing.
5. Forest-related scientific knowledge, including promotion of forestry research and mobilization of the required resources.
6. Forest health and productivity developing national assessment and monitoring methodologies to minimize air pollution and negative entomological and pathological impacts.
7. Development, field testing and promotion of use of citeria and indicators for SFM.
8. Investigation and valuation of economic, social and cultural aspects of forests, including security of land tenure.
9. Forest conservation and protection of unique types of forests and fragile ecosystems.
10. Monitoring, assessment and reporting progress on forest resources and maintenance of national forest statistics.
11. Rehabilitation and forest conservation in low forest cover countries.
12. Rehabilitation and restoration of degraded lands and the promotion of natural and planted forests.
13. Maintaining forest cover to meet present and future needs.
14. Promote and explore innovative financial resources for SFM.
15. Promote policies and actions to facilitate legal trade in forest products.
16 International cooperation in capacity building transfer of and access to environmentally sound technologies for SFM, including strengthening forest education and training for women.

The critical question is: *How can countries like Zimbabwe move towards implementation of the IPF/IFF proposals for actions?* Firstly, to promote cross sectorial coll0 Tc -0.336-capaci, gTc 08re 0.ic1614c1614c163 61.5 (al

- This session was bogged down with intractable country positions and an ambitious negotiating agenda.
- European delegates were determined to get a set of policy commitments and insisted on quantifiable and time bound global goals and national targets.
- Financial resources for implementation of the proposals for action remained at the centre stage.

UNFF6

- A draft resolution for adoption by the Economic and Social Council (ECOSOC) of the United Nations was produced.
- Draft elements of the Voluntary Code/Guidelines/Understanding which must be submitted by member countries through the African Group before 30 June 2006.
- UNFF will conclude and adopt at its seventh session a non-legally binding instrument on all types of forests.

The following timelines regarding input into the UNFF process should be considered:

(i) Some countries submitted their proposals at the UNFF6 meeting. These should serve as a guide to the development of Zimbabwe's proposals, which must be submitted by end of June 2006.

(ii) UNFF6 will circulate a compilation of Draft Indicative Elements by end of July 2006, to which comments are required by 31 August 2006.

(iii) An *ad hoc* working group meeting will be held during the last quarter of 2006 to develop the content of a NLBI.

(iv) The effectiveness of the NLBI approach will be reviewed in 2015, at which options of a LBI shall be considered.

5 CHALLENGES IN THE IMPLEMENTATION OF THE IPF/IFF PROPOSALS IN AFRICA

Implementation of the IPF/IFF proposals particularly in the Southern African region has been hampered by 6 main factors:

- Lack of awareness of IPF/IFF and UNFF processes and outcomes.
- Lack of human and financial capacity to prioritise and implement them.
- Inadequate participation in international forestry dialogue due to lack of information on the issues at stake, resulting in junior staff being sent to participate.
- Lack of financial resources for the international trips to mostly Europe and America where the meetings are often held.

- Lack of backstopping from regional institutions like the SADC Secretariat to synthesize the proposals for actio

CHAPTER 2: ASSESSING AND MONITORING OF FOREST RESOURCES

Inventories provide static assessments of forest resources
Monitoring assesses changes in status and trends

Table 1: Indicators required to inventory and monitor forest and woodlands to meet national and international requirements

INDICATOR	UNIT OF MEASURE	FREQUENCY
Wood stocks/biomass	ton/ha	5 -10yrs
Biomass	ton/ha	5 -10yrs
Ecosystem and habitats	sq km	5-10yrs
Forest fragmentation	sq km or %	5-10yrs
Land cover	Sq km	5-10yrs
Fuelwood	Tons	5-10yrs

RECOMMENDED SAMPLING TECHNIQUES

- Multiphase/multistage inventories
- Linear and non linear regressions models
- Expert systems

CHAPTER 3: ASSESSING AND MONITORING OF FOREST RESOURCFOREST BIOLOGICAL DIVERSITY

Forest biological diversity provides a wide array of goods and services from timber and non-timber forest resources to playing an important role in purifying, recycling and storing water and mitigating climate change. At the same time it provides livelihoods and jobs to millions of people. Forest biological diversity plays an economic, social and cultural role in the lives of many indigenous and local communities.

ELEMENT A: CONSERVATION, SUSTAINABLE USE AND BENEFIT SHARING

1. Apply the ecosystem approach to management of forests and woodlands
2. Reduce threats and mitigate the impact of threats on forest biological diversity
3. Protect, recover and restore forest biological diversity
4. Promote the sustainable use of forest biological diversity
5. Promote access and benefit-sharing of forest genetic resources

ELEMENT B: INSTITUTIONAL AND SOCIO ECONOMIC ENABLING ENVIORONMENT

1.
2. Address socio-economic failures and distortions that lead to decisions that result in loss of biological diversity
3. Increase public education, participation and awareness

ELEMENT C: KNOWLEDGE, ASSESSMENT AND MONITORING

1. De improve the assessment
2. Improve methods for assessment of status and trends of forest biological diversity
3. Improve understanding of the role of forest biodiversity and ecosystem functioning
4. Improve infrastructure fore data and information management for accurate assessment and monitoring forest biological diversity.)

CHAPTER 4:

powers to inspect and certify fire equipment and preparedness of private forest companies and Communities living around gazetted forest areas.

Article 3.

Forest Users' Duties in Protection of Forests against Fires

Forest users shall have the duty to work out and confirm, in agreement with the Forestry Commission, plans for fire-prevention measures, and also to implement these within the established periods. The Forestry Commission shall assist forest users in working out plans of fire-prevention measures. The schedule of fire-prevention measures and the requirements on plans for such measures shall be determined and approved by the Forestry Commission.

Communities in forest areas where traditional ceremonies, mass cultural and other functions are held shall have the duty to be in possession of fire-fighting facilities, in accordance with the norms approved by the Forestry Commission and the Ministry of Environment and Tourism and also to maintain the aforesaid facilities during fire-hazard periods in readiness for immediate use thereof. In the absence of approved norms for the aforesaid facilities, Communities shall have the duty to be in possession of primary fire-fighting facilities, the schedule and quantity whereof shall be determined and approved by the Forestry Commission.

Article 4.

State Fire Supervision in Gazetted Forests and in Forests outside Gazetted Forests.

State fire supervision in the gazetted forests and in forests outside the gazetted forests shall be effected by Forestry Commission Officers for the purposes of control of compliance by Communities with the requirements and rules of fire safety in the forest areas and in forests outside the gazetted forests, and also for the purposes of cutting short any breaches thereof.

Communities on lands bordering gazetted forests and in forests outside the gazetted forests shall bear criminal, administrative and other liability for breaches of the requirements and rules of fire safety, in conformity with the Forest Act.

Article 5.

Protection of Gazetted Forests and of Forests outside Gazetted Forests against Forest Pests and Diseases.

Protection of the gazetted forests and of forests not within the gazetted forests against forest pests and diseases shall be ensured by close surveillance on the condition of the gazetted forests and of forests outside the gazetted forests,

timely detection of forest pests and diseases, and prophylactic measures to prevent the origination of these, and for the localization and eradication thereof.

Protection of the gazetted forests and of forests outside the gazetted forests against forest pests and diseases shall include the following measures:

- current, expeditionary and other forest-pathology check-ups. There is need to invest in new technologies like aero visual assessments of forests;
- general, reconnoitering and detailed supervision of development of forest pests and diseases;
- elaboration of ground-based measures in combating forest pests and diseases. There is need to invest in other technologies like GIS and use of aerial techniques;
- research on prophylactics of forest diseases and for the eradication of forest pests and diseases;
- state control of the conduct of the aforesaid measures.

Measures in protecting the forest estate and forests outside the forest estate against forest pests and diseases shall be regulated by sanitation rules confirmed by the Forestry Commission.

Article 7.

Participation of Forestry Commission in Combating Forest Fires and Forest Pests and Diseases.

For the purposes of preventing forest fires, of fighting these, and also of combating forest pests and diseases, the Forestry Commission shall:

- arrange annual elaboration and fulfillment of plans of measures for the prevention of forest fires, for the anti-fire infrastructure of the forest estate and of forests outside the forest estate;
- ensure the readiness of organizations charged with the conservation and protection of forests, and also of forest users for the fire-hazard season;
- confirm annually, before the onset of the fire-hazard season, operative plans for combating forest fires;
- establish the rules for involving the Communities, employees of commercial and noncommercial organizations, and also fire-fighting hardware, transport and other facilities of the aforesaid organizations to put out forest fires;
- provide, for the period of high fire hazard in forests, for the formation of forest-fire units from among Communities recruited for putting out forest fires, and shall ensure the readiness of these units for immediate deployment in the event of forest fires;
- create a reserve of fuel and lubricating materials for the fire-hazard season;
- arrange the conduct of anti-fire programmes, regular publication in the mass media of items on the need to safeguard forests and to abide by the rules of fire safety in forests;
- ensure forest pests and diseases outbreaks are combated and sanitary state of forests is improved;
- prohibit the presence of citizens in forests and the use of forests when measures are taken to combat forest pests and diseases.

Article 8.

Duties of Citizens and Legal Persons in Preventing Negative Impact on Condition of Forests.

Citizens and legal persons, in the conduct of activity which may have or does have a negative impact on the condition of forests, shall have the duty to carry out technological, sanitary and other measures for conservation and protection of

forests, in coordination with the Forestry Officers of the Forestry Commission and with other Government agencies.

Article 9.

Participation of Citizens and Public Associations in Ensuring Rational Use, Conservation, Protection and Reproduction of Forests

Citizens and Public Associations may take part in ensuring the rational use, conservation, protection and reproduction of forests, in conformity with the Forest Act.

Article 10.

Updating and strengthening of the proposed Forest code on Forest Health and Vitality:

Since Forest health and vitality issues are changing from time to time there is need for FC to carry out research and monitoring of the state of our forests and to carry out educational campaigns for communities.

1. **Assess management activities that may influence forest health.**
   - ü Investigate prescribed burning as a legitimate management tool to maintain fire dependent communities.
   - ü Develop guidelines and safety procedures for the use of fire as a silvicultural tool
   - ü Investigate herbicide and pesticide effects on non-target species.
   - ü Seek information on the control of non-indigenous invasive species and imbalances in native species.

2. **Utilize ecologically sound integrated pest management techniques to assess and protect state forest ecosystems.**
   - ü Develop integrated pest management plans for significant forest damage causing agents.
   - ü Develop an early detection and rapid response program for non-indigenous invasive species.
   - ü Maintain accurate records of damaging forest agents and events.
   - ü Mitigate the effects of destructive forest agents on the health of state forests to reduce forest value losses.
   - ü Strive to maintain forest insects and diseases at ecologically acceptable levels.

3. **Ensure Forest Health activities are conducted in a safe manner**.
   - ü Train FC staff, forest fire wardens and forest companies on wildfire prevention and fire suppression techniques.

- ü Conduct appropriate safety training as related to Fire and Pest Management activities.
- ü Keep abreast to current technologies that improve safety and reduce health risks.
- ü Develop and implement “Forester Training Card”, an orientation checklist for new Foresters.

4. <u>Educate state forest users on forest health and wildfire prevention.</u>

- ü Provide forest users with readily available, easily understood and usable forest health information and training.
- ü Provide information and education on wildfire prevention.
- ü Keep the public informed of wildfire conditions.
- ü Use Forestry Extension Officers and Community Forestry Promoters as an important link in communicating this effort to the public.
- ü Set minimum widths for fireguards and fire traces as per the Forest Act.
- ü Monitor and approve the above for other Forest Owners and Users.

5. <u>Minimize damage to forest ecosystems by wildfire.</u>

- ü Suppress wildfires that occur on state forestland.
- ü Assist and monitor the suppression of wildfires in all other forests (e.g. private forest land).
- ü Utilize fire suppression methods appropriate to local resource conditions, characteristics and limitations.

CHAPTER 5: PRODUCTIVE AND PROTECTIVE FUNCTIONS OF FOREST RESOURCES

Introduction

The productive area (forestry) refers to the total area of a specific forest category, less any land used for roads, settlements, water bodies and other developments. This is defined by the ability of a particular forest to provide wood and non-wood products for their use and non-use values.

On the other hand protective functions of forest resources refer to services which are not consumables but are rendered by forests for various environmental safeguards.

Below is a list of Productive and Protective functions of forest resources:

Productive Function	**Protective Function**
1. Industrial Timber	Soil Conservation/Protection
2. General Purpose Timber	Catchments Protection
3. Grazing/Browsing	Biodiversity
4. Habitat	Carbon Fixation
5. Fruit/Food/Resin	Climate Regulation
6. Medicine	General – Protection of Life
7. Wildlife	Support systems i.e. soil, air and water
8. Fuel Wood	

Maintenance of Productive Capacity

Indicators

1. Area of Forestland and net area of Forestland available for timber production.

2. The area and growing stock of plantations.

3. Annual removal of wood products compared to volume determined to be sustainable.

4. Annual removal of NTFP compared to levels deemed sustainable.

5. Total growing stock for both merchantable and non-merchantable tree species on forestland available for timber production.

Protective and Productive Functions of Forests

Indicators

- Area and percent of forestland with significant soil erosion.
- Area and percent of forest managed primarily for protective function e.g. riparian zones, watersheds.
- Percentage of stream kilometres in a forested catchment in which stream

3. Develop and implement innovative mechanisms and improved coordination of **donor activity** for effectively financing, encouraging and implementing **integrated cross-sectorial policies to support forest conservation**.

4. Develop and implement **methodologies and criteria** to assess the adequacy, consistency, condition and effectiveness of protected areas and their **management** (monitoring and).

5. Establish joint protected areas and guidelines or unique transboundary forests/areas.

6. Encourage cooperation and coordination of activities concerning forests and trees in environmentally critical areas/sensitive areas including systematic data collection and **analysis** (forest inventory).

7. Give high priority in national forest programmes to the rehabilitation and sustainable management of forests and trees in environmentally sensitive areas.

8. Enshrine environmental audit tools in Forest Management Plans e.g. EIAs, Forest Certification.

9. With stakeholders review and develop a National Forest Action Programme (NFAP) and abide by same.

10. Productive area for every forest category should be defined in space and time strengthened by legislation.

11. Development of small growers under land reform to help set aside productive areas in these zones.

12. Absence of a policy on integrated resource development impacts negatively on protective functions of forests due to continued forest conversion into other uses without considering forest as a viable land use option e.g. land use plans and integrated catchment area management.

13. Economic forest valuation should be done with specific objectives in mind e.g. land use allocation based on suitability and advantages.

move into and out of these activities as conditions change. Also, the process of commercialization is intricately related to issues which include among other things; the expansion of the labour economy, the emergence of markets in urban areas, and changes in market access due to infrastructural development, tourist season, or other factors (Ibid). Despite the prevalence of commercialization in Zimbabwe, the current legislation is not supportive of this activity. Many forest policies and legislative instruments are geared toward limiting commercialization of forest products through controls and regulations like licensing, permit systems, and royalty collection (Dewees, 1994).

2.0 The Socio-Economic Benefits of Forests and Woodlands

2.1 Background

The total land area of Zimbabwe is about 39 000km^2 and Kwesha and Dreiser, 1997 estimate that about 59% of the total land area is still wooded. FAO estimates indicate that in 1963 communal areas of Zimbabwe had 60% of their area under forests and woodlands, and by 1978 this area had been reduced to 30% (Bradley and Dewees 1993) and it can also be assumed that, as a result, the range of non-timber forest products experienced subsequent reduction.

Zimbabwe's forest resources contribute about 3-4% to the Gross Domestic Product (GDP) with the bulk coming from the conventional forestry plantation industry. This GDP figure grossly understates the many direct and indirect benefits derived from natural forests and woodlands for the sustenance of rural livelihoods. Apart from providing fuelwood and construction materials for over 80% of the rural households; natural forests and woodlands contribute to food security through the provision of other products such as fruit, honey, mushrooms, bushmeat and medicines; they enhance agricultural productivity through nutrient recycling; they preserve watershades; they sequestrate carbon; and they also have biodiversity and aesthetic values. Thus, forests and woodlands clearly have a role in providing a platform for broad based economic activities for rural communities. They also help in alleviating rural poverty since it has been established that there is a strong association between rural poverty and food security (Dewees, 1994)

Indigenous forests and woodlands are very important in meeting household needs, especially in rural areas located in marginal agroecological zones of the country. Most of the woodlands in Zimbabwe are under threat of degradation due to among other things, the alienation of communal woodlands/forests by the state as well as the high population growth rate, which leads to high demand for land for both settlement and agricultural purposes. It is estimated that Zimbabwe losses about 1.5% of its forest area of about 23 million hectares with more than 100 000ha being lost to agricultural expansion each year. However, natural woodlands and forests appear to still have a niche in the farming and livelihood

systems of small holder farmers and there is potential for the domestication of some species.

The utilisation of forest products is often viewed as a way of increasing incomes and improving food security of households in communal areas, especially those located in marginal agroecological zones. Most of the forest products and their related by-products are available during the dry season and often act as a cushion during drought years when field crops have failed. Trade in these products around the country is prevalent and has potential for expansion with increased shelf life of the products through improved processing and packaging.

The commercial forest sector is dependent on about 156 000ha of plantations under exotic species mainly pines, eucalypts and wattle. Sawmills processing softwoods increased from 39 in 2001 to 46 in 2003 and production of rough sawn timber stood at about 390 000m^3 while pole production stood at about 82 000m^3 in 2004. The sector directly employs about 20 000 people while another 1 200 are indirectly employed in the sector. Of these, 60.4% are employed in the forestry and timber processing sector; 39.5% are employed by the furniture manufacturing sector; and the remaining 0.05% is in the ancillary and down stream employment such as the informal sector. These figures represent 5-6% of the total manufacturing workforce and 2.8% of the total manufacturing sector production. A further 34 000m^3/year of commercial indigenous rough sawn timber comes from natural forests located in the north-western parts of the country and employs quite a sizeable number of people.

The social forestry sector is concerned with the utilisation and conservation of natural forests and woodlands, tree planting and management to meet the various needs of the people especially, those in the rural areas. Table 1 shows the value share of selected common forest products and services based on a case study from a communal woodland in Zimbabwe.

Leaves and roots of wild plants and herbs are other important sources of food derived from forests and woodland. McGregor (1995a) found out that many of the wild vegetables came from disturbed areas growing as weeds. A total of 39 wild vegetables were gathered from the woodland in Shurugwi (McGregor 1995a).

Meat from wild animals has been a source of protein for rural households since time immemorial. The meat comes from both large and small wild animals such as kudu, eland, buffalo, bush pigs, impala, hares, birds and mice for example. Populations of game animals have become depleted in most areas with dense human settlement as a result of hunting and habitat destruction.

Apiculture is a traditional occupation throughout the forests and woodlands in Zimbabwe. Productive woodlands are those dominated by nectar producing genera such as *Acacia, Brachystegia, Julbernardia, Syzygium and Combretum* tree species. Although there are various species of both stinging and stingless bees in Zimbabwe, the honey producing African stinging bee (*Apis mellifera scutellata*) is the main species being managed by people for commercial honey production (Hepburn and Radlof, 1998). Forests and woodland destruction has increasingly led to the decline in honey and beeswax production in some areas of the country. Export of honey and beeswax is an important foreign currency earner (Chihongo 1995).

2.2.2 Construction Materials

The forests and woodlands in Zimbabwe are an important supply of construction material though in some areas the resources have become degraded, particularly the large diameter posts of durable timber. House construction in communal and resettlement areas requires many poles of different dimensions, durability, as well as thatch grass and rope fibre for tying. These materials have to be replaced at frequent intervals (Grundy et al. 1993; Vermeulen 1993). There are high levels of selection for preferred species and sizes when people are harvesting and buying these materials (Shackleton 1993). In the last few decades there has been increased commercialisation of thatch grass (*Hyparrhenia spp*.) but less so of poles, except in areas of high scarcity.

2.2.3 Curios, Artefacts and Household Implements

Wood that is not normally used for industrial timber is the principal material for making domestic implements (plates, cooking sticks, bowls, hoe and axe handles, pestles and mortars, bows and arrows, drums, ox harnesses and walking sticks). Such wood is also used for curio carving. These artefacts can be important income earners, locally and in urban markets. Curios are an important source of foreign exchange. For these items specific attributes such as wood density, lightness, durability, flexibility, resistance to splitting and grain pattern are required for each specific purpose (Grundy et al. 1993; Vermeulen 1993).

2.2.4 Wood Fuel

Over 80% of rural households are dependent on fuelwood for energy. While firewood has traditionally been collected and harvested for domestic use, it has increasingly become a commercial commodity mainly destined for urban areas. Transportation of firewood to urban areas, where there is a growing demand, is

It is known that indigenous people have developed complex and sophisticated knowledge systems about the use of a vast diversity of plants for medicinal purposes for a variety of ailments.

some tree species which are not supposed to be cut (e.g. *Parinari curetilifolia*) are associated with sacred religious rites such as rain-making and resting places for the spirit mediums. For instance, in Chirinda Rain Forest (the most southerly tropical rainforest located in the south-east of the country) whose English

2.3.5 Grazing

benefit sharing mechanisms among the custodians of the forest/woodland resources.

While forest policies and legislative instruments recognise the rights of local people to use woodlands products in their local areas, the same however prohibits the selling of such products, restricts the use of products where

therefore to create an institutional framework that ensures that local communities share equitably in the management responsibilities and benefits from woodlands. There is also need to capacitate these locals to the level of competent managers and decision makers.

CHAPTER 7: Policy, Legal and Utilization Framework

Policy

Forest policy in Zimbabwe can be divided into two broad sections, policy on Commercial Forestry and policy on Social Forestry. The policy on Commercial Forestry aim at promoting Industrial forestry (plantation development, saw milling and marketing of timber and timber products) whilst the policy on social forestry aims at supporting Conservation and protection of forests so that they can continue fulfilling their ecosystem functions.

Forest policy is guided primarily by the Forest Act (Chapter 19: 05 as amended in 1999) and the Communal Lands Forest Produce Act (No. 20 of 1987). It is also guided by other pieces of legislation that deal with the environment, customary practices as well as international Conventions.

The Forest Commission is the state forestry authority in Zimbabwe. It has the mandate to oversee implementation of the forest policy. Its function include regulation of the forestry sector, forestry extension, Management of gazetted forests, forest research and forestry training.

Legal Instruments

Forest Act	Provides for the establishment of the Forestry Commission with the mandate to protect and conserve forests for the benefit of the nation as the forest authority, and as forest enterprise to set aside and manage land for production/industrial forestry. It also provides for the regulation and supervision of timber extraction by private land holders and concessionaires
Communal Lands Forest Produce Act	Restricts use of forest produce in communal areas to 'own use'. It also empowers RDCs to grant licences to concessionaires for commercial timber harvesting and prohibits use of reserved tree species and harvesting from reserved forests.
Communal Lands Act (1985)	Transferred control of communal lands traditional leaders and placed them under the President through RDCs. RDCs allowed to develop land use plans that override customary land claims and are empowered to issue licenses for commercial extraction of natural resources. The Act provides model by laws for the development and conservation of natural resources.
Rural District Councils Act 1988	Bestoes the responsibility for long term planning and development of natural resources on RDCs. It also provides for RDCs to enact bu-laws to regulate natural resource use, issue licences for commercial extraction of natural products and powers to establish Natural resources management committees
Land Acquisition Act 1993	Provides for expropriation of commercial farmland under a system of designation of under-utilised land for the purposes of Providqp2.7mr( ) Tj 89.25 1822.7re1nu75 .go375 63 f 19738.25 0.75 0.7ct (Prg9 -

management must be aligned to it. It has repealed the Natural Resources Act and requires other environmentally related Acts including the Forest and Communal Lands Forest Produce Act to realign themselves to this framework Act as outlined under schedule 6.

2.2 Management of forests on state land Communal and Resettlement areas

The management of forests and woodlands on state land is undertaken either directly or indirectly by the forestry Commission. In communal and resettlement areas, th

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CHAPTER 8: FORESTRY RESEARCH

Introduction.

Forestry research in Zimbabwe dates back to 1948. Currently the Research and Training Division of the Forestry Commission is conducting relevant cost-effective forestry research for the entire forestry sector in Zimbabwe that is responsive to user needs. Apart from the Forest Act forestry research is being conducted without a code of conduct and this is what this short papers is trying to address.

Article 1.

Guidelines governing conducting of forest research and investigation in Zimbabwe.

- Conducting forest research in state forests and privately owned forests by respective organizations shall be done without any payment for the use of land by the research Institution (Must use suitable land free of charge). FC personnel shall also be accorded free access to any land for the purposes of trial establishment and assessment of forestry research.

- Where there is need for land to set up trials on privately owned land, land shall be ceded for that purpose. Ceded land shall not be used for any other purpose until the research is concluded.

- FC's Research and Training Division shall be given the prerogative to select areas wherever in Zimbabwe it feels is suitable for forestry research.

- FC's Research and Training Division must be given a prerogative to protect certain forest areas because of their scientific value e.g Chirinda rain forest .

- FC may restrict or prohibit people in the use of forest estate areas where the given forest use is incompatible with the purposes of research that will be conducted in that area.

- No active research trials will be harvested or interfered with in any way by anyone without the approval of FC's Research and Training Division

Article 2.

Guidelines on Silvicultural Management in Zimbabwe.

- A silvicultural zone map will be developed by FC's R&T Division to guide the Forestry Industry on which tree species to plant where. This map will be drawn on the basis of the different climatic requirements of the different species.

- Clear felling will only be allowed in pure stands of exotic tree species and not in indigenous forests and woodlands. Clear felled areas must be replanted within a maximum of two years. FC will monitor that Industry is abiding with this guideline.

- Allowable cut will also be established and monitored by FC. Allowable cut will be based on the sustained yield approach.

- Pruning regimes for different pine species will be developed by FC's R&T Division for use by industry. This will be developed according to end product.

- Thinning regimes for different pine species will be developed by FC's R&T Division for use by industry. This will be developed according to end product.

- Rotation length will be established for the different tree species including coppice management for eucalyptus species.

Article3.

Guidelines on harvesting.

Forest harvesting operations are most likely to meet economic, silvicultural, environmental and social objectives if they are carried out as outlined below. In general, four ingredients can be identified as essential in relation to forest harvesting operations if forests are to be managed on a sustainable basis:
- comprehensive harvest planning;
- effective implementation and control of harvesting operations;
- thorough harvesting assessment and communication of results to the planning team and to harvesting personnel;
- development of a competent and properly motivated workforce.

1. Before harvest planning is initiated, a comprehensive land-use plan should be completed to identify the permanent forest estate and the portions of

this estate on which timber harvesting will be permitted. The land-use plan should also show areas of forest, if any, from which the trees are to be removed so that the land can be used for other purposes such as agriculture.

2. A comprehensive forest management plan should be developed before a harvesting plan is developed.

3. Comprehensive harvest planning is essential in order to set the stage properly to enable sustainable harvesting practices to be followed, and also to reconcile the need for greater technical control during harvesting with the need to reduce harvesting costs simultaneously. It should be undertaken by an interdisciplinary planning team, that includes foresters, ecologists, logging specialists, engineers, wildlife biologists and other individuals representing specialities in the social sciences.

A. A map and a written plan are elements of a good harvesting plan.

- A topographic map accurately showing the boundaries of the harvest area and the location of water courses, swamps or other areas of wet soils, gullies, rock outcrops, sites of religious or cultural significance and any other feature that may influence harvest planning.
- Streamside buffer zones delineated on the map as well as other special management areas in which cutting is either to be prohibited altogether or will be subject to special restrictions. These might include areas of significant scientific, recreational, cultural or aesthetic value, special reserves for wildlife or for the production of non-timber forest products, water catchments, areas of saturated

addressed in formulating the plan;
- detailed information concerning the forest transportation system, such as road design parameters for different conditions (valley bottoms, ridgetops and climbing roads), locations and specifications for major stream crossings, typical spacing and design specifications for drainage structures and other similar information;
- annual labour requirements for harvesting operations and for construction and maintenance of the forest transportation system;
- provisions for living quarters and other facilities needed to accommodate forest workers, together with general information on health and safety provisions;
- the estimated cost of harvesting operations in each coupe and of construction and annual maintenance of the forest transportation system.

D. A harvest plan should specify ways of: -

Article 4.

Financial and Material support to forestry research in Zimbabwe.

- **Forestry research in Zimbabwe must not be, supported solely by Government as beneficiation from that research cuts across many facets of the Zimbabwean society. The Forestry sector and various other sectors must support forestry research to reduce burden on the fiscus.**

- **Research is associated with long term investments especially in areas of human development and equipment. There is therefore a need for Private Sector to invest in training of research personnel especially on job short training courses.**

Article 5.

Guidance of Forestry Research in Zimbabwe.

- Forestry Research in Zimbabwe will be guided by a formally constituted Forest Research Board.

- **Composition of the Board will be in such a way that both plantation and indigenous social forestry research will be catered for. The Board will draw members from: NGOs community, Agricultural Sector (Tobacco Wood Energy), Government (MET), Universities, Timber Producers Federation, Forestry Sector and Independent forest Experts.**

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