APPROVED

NATIONAL FOREST POLICY, 2006

FEDERAL MINISTRY OF ENVIRONMENT ABUJA

TABLE OF CONTENT

PAGE

CHA	PTER ONE	
1.0	A BACKGROUND NOTE TO THE NEW NATIONAL FOREST	
	POLICY FOR NIGERIA	1
1.1	Forestry and the Nigerian Economy	1
1.2	Forestry and the Nigerian Constitution	
1.3	The Forest Resources	
1.4	Non Timber Forest Products	5
1.5	Biodiversity Conservation	
1.6	Fuelwood	6
1.7	Forest Product Harvesting and Utilization	7
1.8	Forest Industries	
1.9	Forestry Research	9
1.10	Employment, Safety and Security	
1.11	Tourism	
1.12	Factors Responsible for the Decline in Forest Resources	11
1.12.1	Exploitation	
	Deforestation	
	Farming	
	Population Growth	
1.12.5	New Settlements	13
	Infrastuctural Development	
	Fuelwood	
1.12.8	Uncontrolled Forest Fires	14
	Over Grazing	
	0 Poorly Organized Industrial Exploitation of Timber	
	1 Weak Institutional Capacity	
1.13	The Need for a National Forest Policy	
1.14	The Purpose of the National Forest Policy	
1.15	The 1988 National Forest Policy	
CHAP	TER TWO	
2.0	GUIDING PRINCIPLES FOR THE NATIONAL FOREST POLICY	19
2.1	National Objectives	
2.2	Livelihoods and Poverty Reduction	
2.3	Food Security, Biodiversity Conservation and Environmental Services	
2.4	Partnership in Governance	
2.5	National Forestry Legislation	
2.6	International Obligation	
2.6.1.	Carbon Credits	
2.7	Forestry Valuation	

CHAPTER THREE	
3.0 FOREST POLICY STATEMENTS, OBJECTIVES AND STRATEGIES	
3.1 Policy Objectives	
3.2 Strategies	
3.3 Priority Areas for Sustainable Forest Management	
3.3.1. FOREST MANAGEMENT	
3.3.1.1 Policy Statement	
3.3.1.2 Objectives	
3.3.1.3 Strategies on Forest Reserve Management	
3.3.1.4 Strategies on Plantation Establishment and Development	
3.3.1.5 Strategies on Areas Outside Reserves	
3.3.1.6 Strategies on Agro-forestry	28
3.3.1.7 Strategies on Establishment of Model Federal Forest Reserves	28
3.3.1.8 Strategy for Accessing Carbon Credits	
3.3.1.9 Strategy for Forest Valuation	29
3.3.2 COMMUNITY PARTICIPATION: IN AND OUTSIDE FOREST RESERVES	00
3.3.2.1 Policy Statement	
3.3.2.2 Objectives	
3.3.2.3 Strategies for the Implementation of this Policy	
3.3.2.5 Strategies in Free Areas (Outside Forest Reserves)	
3.3.3 PRIVATE SECTOR INVOLVEMENT AND PARTICIPATION IN	30
FORESTRY DEVELOPMENT	21
3.3.3.1 Policy Statement	
3.3.3.2 Objectives	
3.3.3.3 Strategies on Land Tenure	
3.3.3.4 Economic and Social Incentives	
3.3.3.5 Strategies on Benefit Sharing	
3.3.3.6 Strategies on Tree Ownership	
3.3.4 BIODIVERSITY CONSERVATION, NATIONAL PARKS AND GAMES	02
RESERVES OF CONSERVATION INTEREST	33
3.3.4.1 Policy Statement	
3.3.4.2 Objectives	
3.3.4.3 Strategies to Support, Improve and Sustainably Manage Species	
Composition (Flora and Fauna):	34
3.3.4.4 Strategies on Host Communities-Partnership and Empowerment	34
3.3.5 FOREST INDUSTRIES	
3.3.5.1 Policy Statement	36
3.3.5.2 Objectives	
3.3.5.3 Other Strategies on Efficiency in Forest Harvesting, Conversion and Production	36
3.3.5.4 Grading Rules, Quality Control, Certification, Log Tracking, Etc	37
3.3.5.5 Strategies on Training in Sawmilling, Saw	
3.3.5.6 Strategies on Utilization of Lesser-Used Species	
3.3.5.7 Strategies on Safety and Forest Health	37
3.3.5.8 Capacity Utilization and Resource Exploitation	38
3.3.5.9 Strategy on Value Added Downstream Products	.38
3.3.5.9 Strategy on Waste and Residues Utilization	

3.3.6 FOREST ADMINISTRATION	38
3.3.6.1 Policy Statement	39
3.3.6.2 Objectives	39
3.3.6.3 Strategies Institutional Management and Empowerment at all Levels	39
3.3.6.4 Strategies on Communities and Private Sector Empowerment	
3.3.6.5 Strategies on Roles and Responsibilities	
3.3.7 NON-TIMBER FOREST PRODUCTS	
3.3.7.1 Policy Statement	42
3.3.7.2 Objectives	42
3.3.7.3 Strategies	
3.3.8 ENVIRONMENTAL SERVICES OF FORESTS	43
3.3.8.1 Policy Statement on Protection	44
3.3.8.2 Objective	44
3.3.8.3 Strategies	
3.3.8.4 Policy Statement on Social Forestry	44
3.3.8.4.1 Objective	
3.3.8.4.2 Strategies	45
3.3.9 WATERSHED FORESTS AND WETLAND MANAGEMENT	
3.3.9.1 Policy Statement	
3.3.9.2 Objective	
3.3.9.3 Strategies	
3.3.10 AGRO-FORESTRY	
3.3.10.1 Policy Statement	
3.3.10.2 Objective	
3.3.10.3 Strategies	
3.3.11 URBAN FORESTRY	
3.3.11.1 Policy	
3.3.11.2 Objectives	
3.3.11.3 Strategies	
3.3.12 POVERTY ALLEVIATION AND FOOD SECURITY	
3.3.12.1 Policy Statement	
3.3.12.2 Objectives	
3.3.12.3 Strategies	50
3.3.13 SUPPLY OF SEEDS AND SEEDLINGS	
3.3.13.1 Policy Statement	
3.3.13.2 Objectives	
3.3.13.3 Strategies for the Implementation of this Policy Statement	
3.3.13.4 Other Strategies	52
3.3.13.4 FORESTRY RESEARACH AND DEVELOPMENT	
3.3.14.1 Policy Statement	
3.3.14.2 Objectives	
3.3.14.3 Strategies	
3.3.15 FOREST FISCAL POLICY	
3.3.15.1 Policy Statement	
3.3.15.2 Objectives	54

	Strategies	
3.3.16	FOREST FIRES	54
3.3.16.1	Policy Statement	55
	Objectives	
3.3.16.3	Strategies	55
3.3.17	PESTS AND DISEASES CONTROL	55
3.3.17.1	Policy Statement	56
3.3.17.2	Objectives	56
	Strategies	
3.3.18	NATIONAL TREE PLANTING CAMPAIGN	56
3.3.18.1	Policy Statement	57
	Objectives	
	Strategies	
	WOODFUELS	
	Policy Statement	
	Objectives	
3.3.19.3	Strategies	59
	DROUGHT AND DESERTIFICATION CONTROL	
	Policy Statement	
	Objectives	
	Strategies	61
	MPLOYMENT, SAFETY AND SECURITY OF PERSONNEL AND	
	ABITAT	
	Policy Statement	
	Objectives	
	Strategies	
	GENDER ISSUES	
		\sim
3.3.ZZ.Z	Policy Statement	
	Objectives	63
3.3.22.3	ObjectivesStrategies	63 63
3.3.22.3 3.3.23	Objectives Strategies YOUTH PROGRAMMES	63 63 6 3
3.3.22.3 3.3.23 3.3.23.1	Objectives Strategies YOUTH PROGRAMMES Policy Statement	63 63 6 3
3.3.22.3 3.3.23 3.3.23.1 3.3.23.2	Objectives Strategies YOUTH PROGRAMMES Policy Statement Objectives	63 63 64 64
3.3.22.3 3.3.23 3.3.23.1 3.3.23.2 3.3.23.3	Objectives Strategies YOUTH PROGRAMMES Policy Statement Objectives Strategies	63 63 64 64
3.3.22.3 3.3.23 3.3.23.1 3.3.23.2	Objectives Strategies YOUTH PROGRAMMES Policy Statement Objectives Strategies MANPOWER DEVELOPMENT, TRAINING AND CAPACITY	63 63 64 64 64
3.3.22.3 3.3.23 3.3.23.1 3.3.23.2 3.3.23.3 3.3.24	Objectives Strategies YOUTH PROGRAMMES Policy Statement Objectives Strategies MANPOWER DEVELOPMENT, TRAINING AND CAPACITY BUILDING	63 63 64 64 64
3.3.22.3 3.3.23 3.3.23.1 3.3.23.2 3.3.23.3 3.3.24 3.3.24.1	Objectives Strategies YOUTH PROGRAMMES Policy Statement Objectives Strategies MANPOWER DEVELOPMENT, TRAINING AND CAPACITY BUILDING Policy Statement	63 63 64 64 64
3.3.22.3 3.3.23.1 3.3.23.2 3.3.23.3 3.3.24.1 3.3.24.2	Objectives Strategies YOUTH PROGRAMMES Policy Statement Objectives Strategies MANPOWER DEVELOPMENT, TRAINING AND CAPACITY BUILDING Policy Statement Objectives	63 63 64 64 64 64
3.3.22.3 3.3.23.1 3.3.23.2 3.3.23.3 3.3.24 3.3.24.1 3.3.24.2 3.3.24.3	Objectives Strategies YOUTH PROGRAMMES Policy Statement Objectives Strategies MANPOWER DEVELOPMENT, TRAINING AND CAPACITY BUILDING Policy Statement Objectives Strategies	63 64 64 64 64 65
3.3.22.3 3.3.23.1 3.3.23.2 3.3.23.3 3.3.24 3.3.24.1 3.3.24.2 3.3.24.3 3.3.25	Objectives Strategies YOUTH PROGRAMMES Policy Statement Objectives Strategies MANPOWER DEVELOPMENT, TRAINING AND CAPACITY BUILDING Policy Statement Objectives Strategies EDUCATION AND AWARENESS CREATION	63 64 64 64 64 65 65
3.3.22.3 3.3.23.1 3.3.23.2 3.3.23.3 3.3.24 3.3.24.1 3.3.24.2 3.3.24.3 3.3.25 3.3.25.1	Objectives Strategies YOUTH PROGRAMMES Policy Statement Objectives Strategies MANPOWER DEVELOPMENT, TRAINING AND CAPACITY BUILDING Policy Statement Objectives Strategies EDUCATION AND AWARENESS CREATION Policy Statement	63 64 64 64 64 65 65
3.3.22.3 3.3.23.1 3.3.23.2 3.3.24.1 3.3.24.2 3.3.24.3 3.3.25 3.3.25.1 3.3.25.2 3.3.25.3	Objectives Strategies YOUTH PROGRAMMES Policy Statement Objectives Strategies MANPOWER DEVELOPMENT, TRAINING AND CAPACITY BUILDING Policy Statement Objectives Strategies EDUCATION AND AWARENESS CREATION Policy Statement Objectives Strategies Strategies	63 64 64 64 65 65 66
3.3.22.3 3.3.23.1 3.3.23.2 3.3.24.1 3.3.24.2 3.3.24.3 3.3.25 3.3.25.1 3.3.25.2 3.3.25.3	Objectives Strategies YOUTH PROGRAMMES Policy Statement Objectives Strategies MANPOWER DEVELOPMENT, TRAINING AND CAPACITY BUILDING Policy Statement Objectives Strategies EDUCATION AND AWARENESS CREATION Policy Statement Objectives Strategies Strategies	63 64 64 64 65 65 66
3.3.22.3 3.3.23.1 3.3.23.2 3.3.23.3 3.3.24 3.3.24.1 3.3.24.2 3.3.25.1 3.3.25.1 3.3.25.2 3.3.25.3 3.3.26	Objectives Strategies YOUTH PROGRAMMES Policy Statement Objectives Strategies MANPOWER DEVELOPMENT, TRAINING AND CAPACITY BUILDING Policy Statement Objectives Strategies EDUCATION AND AWARENESS CREATION Policy Statement Objectives	63 64 64 64 65 65 66 66

	5.3 Strategies	
	6.4 Strategies on Processing and Management Information	
	6.5 Strategies on Reliable and Timely data Acquisition	
3.3.27	LAND, TREE TENURE AND CONFLICT RESOLUTION	68
3.3.27	'.1 Policy Statement	69
3.3.27	7.2 Objectives	69
	'.3 Strategies	
3.3.28	TRADE (INTERNAL AND EXTERNAL)	69
3.3.28	3.1 Policy Statement	70
3.3.28	3.2 Objectives	70
3.3.28	3.3 Strategies	70
3.3.29	SECTORAL COOPERATION	71
3.3.29	0.1 Policy Statement	72
	0.2 Objectives	
3.3.29	0.3 Strategies	72
	NATIONAL AND INTERNATIONAL COOPERATION	
	0.1 Policy Statement	
	0.2 Objectives	
3.3.30	0.3 Strategies	73
	FOREST SECTOR INVESTMENT	
	.1 Policy Statement	
3.3.31	.2 Objectives	74
	.3 Strategies	
CHA	PTER FOUR	_
4.0	SUPPORT FOR IMPLEMENTING THE FOREST POLICY	
4.1	National Forest Programme	
4.2	Institutional Reform	
4.2.1	The Role of Federal Government	
	The Role of State Government	
	Local Government	
	The Private Sector	81
4.2.5	Non-Governmental Organization (NGOs) and Community Based	
	Organizations (CBO's)	81
	The Role of Community	
4.2.7		
4.4	Gender and Equity	83
4.5	Funding Mechanism for Forestry Development	
4.5.1	Government Funding	
4.5.2	Community Funding	
4.5.3	Funding by Other Stakeholders	
4.5.4	Funding by International Organizations	
4.6	International and Regional Cooperation	
4.7	Monitoring and Evaluation	85

CHAPTER ONE

BACKGROUND NOTE TO THE NEW NATIONAL FOREST POLICY FOR NIGERIA

1.0 Introduction

By the standards of Nigerian public institutions, the forest service is an old agency. Few modern agencies can trace ancestry in a straight line of succession since 1908 when the first Forestry Department was created. Fewer still can go back to 1887 when Mr. Moloney, the Governor of Lagos Colony published the Sketch of Forestry of West Africa or with the appointment of Mr. Cyril Punch as the Forestry Officer for Lagos Colony in 1899. Indeed, in 1902, Mr. H. N. Thompson formerly of the Burma Forest Service was appointed Conservator of Forests for the Lagos Colony and Southern Protectorate of Nigeria. And yet from a different perspective, the Nigerian forest service is much younger than most of the trees that are being harvested from the natural forest even today. The aim of this background information is to briefly give an overview of the Nigerian forestry sector.

1.1 Forestry and the Nigerian Economy

Historically, the forestry sector has contributed immensely to the Nigerian economy. There are records of exports of forest produce from this country since 1822. Similarly, before the forest, service was formerly constituted, interested forestry groups had introduced a number of trees and woody species into the country.

Forest resources increasingly constitute a significant element in our national economy. Unlike in the past when forests were taken for granted because they were found almost everywhere, people are becoming increasingly aware of the direct and far-reaching influences of the forest

as the available forests are continually diminishing while the demand for forest goods and services continues to rise.

Forestry and forest industries had played the role of a pace-maker – with major forest products being the mainstay of the country's favourable balance of payments in the past. The sector had accounted for about 2% of the Gross Domestic Products (GDP) and 8% of the agricultural value added over the last two decades. It provides employment for some 1.8 to 2 million people mostly part-time, who supply fuelwood and poles, together with 75,000 people employed in the log processing in the forest zones of south. Timber exports used to be important but were banned in 1976 in the hope of slowing down the rapid destruction of the forests. Import of wood products reached US\$177 million in 1986 and included pulp and paper products worth US\$165 million and wood panels worth The Central Bank of Nigeria (CBN) (2002) put the US\$7.6 million. contribution of forestry to Nigeria's GDP using 1984 factor cost at 1.27% in 1996; 1.24% in 1997; 1.22% in 1998; 1.2% in 1999 and 1.189% in 2000. The total value of the non-wood products and environmental functions are enormous though not completely quantifiable and so are under-estimated in national accounting. In essence, our use of plant materials from forests as industrial raw materials now stands next in importance to their uses as food directly or indirectly with wood still in command as the major structural material for building and other constructional purposes in the country's economy. The forest estate from which wood and other forest products are obtained has been subjected to severe encroachment, vegetation degradation and dereservation for agriculture, roads, transmission lines, expansion of urban area, etc.

1.2 Forestry and the Nigerian Constitution

However, political changes affected the continuity of one forest service for example, the first Forestry Development Plan promulgated for Nigeria:

Forest Administration Plan, Nigeria 1945-55 was half-way through its life-span when a Federal constitution, was instituted in 1952. The objectives of the plan were therefore aborted particularly because under the federal constitution forestry became a regional subject and no Federal Department of Forestry was created.

With the creation of regional forest services, the sector began to witness a setback. For instance, the Federal Department of Forestry Research (now Forestry Research Institute of Nigeria - FRIN) created in 1954 had no direct inputs from the regions and for some years the research department existed only at headquarters level. Most expatriate and indigenous forest officers were deployed to the regional forest services thus depleting the research personnel. At independence, in 1960, the regional forest services were beginning to recover from the institutional break-up that had occurred in 1952. Thus, political development had a very great effect on the strength of the forest service as well as the magnitude and value of benefits accruing from the sector.

1.3 The Forest Resources

The country's forest and woody vegetation resources include the high forests, woodland, bushlands, plantations, and trees on farms. Each of these resources variously contributes to production, protection and conservation functions. Studies show that forest reserves occupy about 96,043 km² or about 10 million hectares, which is about 10 per cent of Nigeria's land area of 923,767 km². The Forest estate is in about 445 gazetted Forest Reserves, distributed over the five main ecological zones:- the Freshwater/Mangrove, the Lowland Rainforest, the Derived Savanna, the Guinea Savanna and the Sudan/Sahel zones. The reserved forests are made up of the following; 20,746km² of high forest, 3,208 km² of derived savanna and 72,089 km² of savanna. This forest estate is the legacy inherited from the Colonial Forest Administration.

Forest reservation in most part of Nigeria reached its peak in the mid 1950's, particularly in the Northern States where approximately 42,000 km² were reserved. Between 1960 and 1972 an area of over 12,900 km² was proposed for reservation in the Northern States. In the south forest reservation has been at a stand still and the prospects of creating more reserves in the future are not there. The situation now is that most of the forest reserves are being subjected to dereservation as a result of increase in population and economic expansion in other sector of the economy.

The gazetted wildlife conservation areas in the country are Game reserves, National Parks and Birds Sanctuaries. About 4.6% of total land area of Nigeria is devoted to wildlife conservation. There are eight national parks occupying a land area of 2,238,296 hectares distributed across the major ecological zones. In addition there are about 28 game reserves in the country on a total land area of 373,978 hectares.

Forestland is widely used by local communities for cultivating crops, grazing and for fuelwood gathering, as well as building materials sourcing. Uncontrolled encroachment and clearing of forestland will continue to occur until management plans are put in place to pursue the objectives for which existing forest estates were constituted. Implementation of these forest management plans will ensure that the objectives of sustainable production, protection and conservation are balanced with the dependence of the local communities on forest resources. Nevertheless, despite the lack of management in forest reserves, the Mean Annual Increment (MAI) per vegetation zone is usually higher than for forest reserves than outside the reserves.

The total forest plantations in Nigeria is estimated 269,000ha to date. They comprise about 109,377ha of Gmelina planted to supply pulpwood to

the nation's pulp and paper industries and 159,623ha of other species mostly for industrial wood production. The other species include *Tectona grandis* (MAI 6-10m³) *Terminalia ivorensis* (10 – 12m³), *Nauclea diderrichii* (8m³), *Triplochiton scleroxylon* (6-8m³), Eucalyptus species (5-10m³), Pinus species (8-10m³) and others especially of the Meliaceae family (*Entandrophragma* and *Khaya* species). All these plantations have been planted in forest reserves often at the expense of natural vegetation.

Presently, the expansion of industrial plantation is constrained by funding situation of the forestry sector since the down turn in the nation's economic fortune. The involvement of the private sector and local communities in industrial plantation development has been modest but constrained by some policies, which include the land and tree tenure, benefit sharing and the prevailing low tariff for all classes of wood, which is far below economic rates. However, in the savanna zone some 2083km² (6,249 hectares) of shelterbelt have been established through the efforts of government with inputs from the communities, especially in choice of site and tree species. Analysis have shown that despite the initial success achieved in plantation forestry establishment by government, the needed level of planting to meet projected wood demand cannot be met, without broadening participation to include communities.

1.4 Non Timber Forest Products

Forest and trees provide an appreciable source of edible fruits and foods, fodder, medicine and cash income for many rural people. In Nigeria, over 150 indigenous woody plants from the various vegetation zones have been identified as yielding edible products for man and animals. For many people in Nigeria, the forests play the role of a pharmacy from which they obtain plant parts for the treatment of ailments. Economic products such as cane/rattan used for the production of baskets, chairs and other

furniture, raphia products for the production of mats and ropes; wrapping leaves; chewing sticks; and honey are obtained from the forest.

1.5 Biodiversity Conservation

Natural vegetation is the main repository of the genetic diversity which is crucial to improvements in agriculture and medicine, as well as the sustained supply of products and raw materials to industries. Undisturbed natural vegetation is often required to protect rare species that are endemic and are in danger of extinction. Despite the difficulties in quantifying and valuing biodiversity, its preservation is a national and global objective in the management of forestry resources. Since the potential use of a gene bank is difficult to foresee, and coupled with the irreversibility of loss of any endangered plant or animal species within on ecosystem, many analysts have opted for a conservation approach. Nigeria is endowed with 4,600 plant species, 707 of which are endemic. Conservation of this unique biodiversity should be assured but is being presently jeopardized by deforestation of the remaining natural forest and the forested wetlands.

Nigeria put in place a National Biodiversity Strategy and Action Plan in 2004. The strategy envisions a Nigeria that integrates biodiversity conservation in truly national programme of sustainable development aimed at substantially reducing poverty and designing a secure future and facilitating the growth of the Nigeria biodiversity industry for the benefit of the Nigerian community and economy, in line with the principles of ecological sustainability and social equity.

1.6 Fuelwood

Fuelwood available on sustainable basis from Forest Reserves and natural woodland is roughly estimated at between 11-17 million m3 per annum (1991). The annual consumption of wood in Nigeria is estimated

to range between 80-88 million m3 of which about 80% is consumed as fuelwood. A potentially large gap between the demand and supply of fuelwood in Nigeria exists so that urgent steps ought to be taken to increase the available supply as well as manage the demand by the introduction of alternatives to fuelwood.

The dependence of the rural population (80% of the total population) on fuelwood for the energy needs and the inefficient utilization of fuelwood have contributed to the supply/demand in-balance of the forest stock, which is more noticeable in the arid zone of the country.

In the effort to reduce the over dependence of the population on fuelwood, some alternative forms of energy, for example, coal, coal briquette, kerosene electricity, Liquidfied Petroleum Gas (LPG), solar energy, biogas etc, need further development as viable potential alternative energy sources to fuelwood. If these are properly developed, the direct ecological implication will lead to a gradual reversal of the trend for improved environment.

1.7 Forest Product Harvesting and Utilization

The current level of demand for wood has outstripped the sustainable level of supply and this situation is expected to deteriorate further. The projected level of demand for wood in the year 2020 is 180 million m³ against a sustainable level of supply of less than 100 million m³. The rapid rate of deforestation in the country (approximately 3.5% per annum) translates into an average loss degradation of 350,000ha to 400,000ha of forest cover every year. These trends do not support the government policy of maintaining 20 –25% of the land area under forest cover for the well-being of the national, regional and global environment. There is therefore the need to evolve strategies to address this issue.

1.8 Forest Industries

Activities of wood based industrial sector dates back to 1783 when some Europeans came into Nigeria. The only method of wood conversion then was pit sawing, which involved laying logs on pits and cutting them with cutlasses. Following increase in demand for sawnwood, an advanced method of using powered saw was introduced in 1914. Sawmill development started in 1909, such that by 1939 there were 16 mills in Nigeria. The number of sawmills increased to 21 in 1946, 35 in 1952, 80 in 1962, 350 in 1974, 1200 in 1981 and 1,349 in 1992. The States that are endowed with high forests have encouraged all types of forest enterprises to the extent that most towns or villages now hosts a wood processing plant of a sort in Edo, Delta, Ondo, Ogun, Lagos and to some extent Kwara and Benue States. Furthermore, wood based industries are also located in the drier Northern States of the country, drawing raw materials from the humid States. All these have compounded the onslaught on the forest resources and hence the unabated "deficit aura".

More importantly, the switch to the establishment of forest plantations necessitating clear-felling of large hectares has also been accompanied by unnecessary wastes of wood resources at various stages, particularly forest exploitation, transportation and processing. On a positive note, the realization of the worsening wood supply situation and of the growing magnitude of wood waste led to the banning of round wood exports in 1975. That intervention in itself was a welcome precedence for Federal Government involvement in the rationalization of the forest industrial subsector whose inspiration and management are firmly noted in the States. Over the years, the national quest for finished wood products has also attracted investments in other wood based industries such as plywood, and veneer mills, particle board mills, pulp and paper mills, and match and splints factories.

1.9 Forestry Research

Research became a department in 1954 with very few activities outside its headquarters at Ibadan until 1964 when the Savanna Forestry Research Station was established in Zaria through the assistance of United Nations Development Programme (UNDP) and the Food and Agriculture Organization of the United Nations (FAO). Over the years, the research and the management services have maintained minimal contact to the exclusion of research results and the development of investigations relating to urgent forest management problems. Although today the Forestry Research Institute of Nigeria (FRIN) has a fair geographical presence in the various ecological zones of the country, nevertheless, the point of interest is the continuing gap between forest service-induced research activities and those that are initiated and financed by the Research Institute itself.

1.10 Employment

The forestry sector employs about 2 million people, mostly part-time, to supply fuelwood and poles; and around 75,000 people in the industrial sector processing logs. This represents over one quarter of the labour force in the manufacturing industry. At present, the wood industries still rank very high, employing about 44.3% of the manufacturing labour force both skilled and semi-skilled.

An unquantified proportion of the rural population is involved in a daily and routine gathering, processing and marketing of such forest products as nuts, mushroom, honey, fruits, bushmeat, fish, fodder, fibre, spices, resins, gums, tannins, medicinal plants and fuelwood.

With the growing population, increasing urbanization and economic activities, the demand for recreation is bound to increase. This leads to more employment from the development of more facilities in urban forestry in such areas as ornamental gardening, landscaping and recreational parks located in most urban centres and major cities in Nigeria.

The safety, health and security of forestry personnel as well as the sustainable management of the plants and animals habitats shall be of paramount consideration.

The essential role of forestry in the economy lies in its eminent and dynamic character. With its high rate of multiplier effects, the potentiality of forestry as a source of employment, foreign exchange earnings, the investment proposition is tremendous. These are the considerations which justify the demand that modernization of forestry practice and all that goes with it be accorded a well deserved priority in the present economic dispensation.

1.11 Tourism

With a growing population, increasing urbanization and economic development, the demand for recreation is consequently bound to rise in the country. The quality of life for many citizens could easily be improved upon through the promotion of urban forestry, relaxation centres at the periphery of city-centres and parks. In pursuance of this objective, Nigeria has adopted a number of different categories of conservation techniques ranging from various ex-situ to in-situ thereby encouraging the development of ecologically sensitive areas for ecotourism and other purposes. There are at present 8 National Parks in the country. The eight National Parks have remained the focal point of national tourist attraction and have concentrated on the protection and conservation of the flora and fauna while equally improving on the services available in them.

Undoubtedly, forests provide the capital resource base for the development of Tourism Industry in the country.

1.12 Factors Responsible for the Decline in Forest Resources

1.12.1 Exploitation

The volume of timber export from Nigeria which peaked in 1964 stood at around 700,000m² a year and declined steadily to about 290,000m² in 1970. By 1960, the strain of intensive timber exploitation on the forest resources in Nigeria began to manifest. The most valued species such as the mahoganies, Iroko and Gegu were increasingly scarce in logged areas.

The logging and other forms of activities were concentrated in forests outside the forest reserves. As these areas were logged over and with scarcity of timber in these areas, the activities were shifted to forest reserves to meet the timber demand. Large concession of forest reserves were granted to timber dealers. These concessions have been logged over and over with out due recognition to Annual Allowable Cut (AAC). This has led to serious resources depletion. This brought about the ban of export of logs and sawn wood in 1976 by the Federal Government. There was however, a marked increase in importation of pulp, paper, particleboard and fibre board. This exceeded N150m annually from 1978. The present situation in Nigeria forestry is characterized by inability of the sector to meet pressing national demands and to contribute its maximum quota to national development.

1.12.2 Deforestation

The degradation of Nigeria forest resources in indisputable. Between 1980 and 1990, the annual rate of deforestation averaged 3.5% and the forest area declined form 14.9 million ha. to 10.1 million ha. This translates to the loss of 350,000 to 400,000 ha of forest land per annum for the country. This is leading to phenomena which affect most of the population, including soil degradation, water contamination, siltation and

drying up of water bodes, micro-climate change and the depletion of fauna and flora.

The Environmental Management Project (EMP) report on vegetation and land use changes in Nigeria showed that undisturbed forest decrease from 2.9% of total land area of Nigeria in 1976/78 to 1.3% in 1993/95 – (decrease of 1,383,700 hectares). Also the disturbed forest increased from 1.6% of total area of Nigeria in 1976/78 to 2.1% in 1993/95 – (an increase of 441,700) hectares. The report also revealed that the Riparian forest decreased from 0.8% to 0.6% - a decrease of 214,800 hectares within the same period.

This is an alarming trend. Steps and necessary initiatives should be taken to check this development. Otherwise, the fear that the remaining forest area of the country would disappear in the next three decades might become a reality.

1.12.3 Farming

There are several factors for decline in the forest resources. Man is the most important. The clearing of land for farming accounts for over 80% of total forest area deforested every year. Majority of the farmers (more than 20 million) practice shifting cultivation where by each farmer cultivates a plot of land for two to three years after which soil fertility is depleted and he moves to another plot to allow the previous plot to fallow and recuperate. During land preparation by the farmers, the trees are felled and burnt on site. As cultivated lands are depleted, farmers look to forested lands for fertile soils. The tendency is for farmers to encroach on forest reserves where soils are relatively more fertile. This means more deforestation and depletion of forest resources.

1.12.4 Population Growth

Population growth also is an important factor of forest resources depletion in Nigeria, the population growth rate is put at about 3%, which is quite high, while the nation's population is estimated at over 120 million. The implication of this is that with the growth of the farming population more farming land would be required. This will put a correspondingly increased pressure on forest lands. This is because every new farmer in the community is entitled to a piece of land for farming. Under the customary land tenure systems prevailing in most parts of Nigeria, forest lands outside forest reserves are owned by communities.

1.12.5 New Settlements

In addition population growth has impact on resource depletion as new settlements spring up to accommodate new families. Existing towns grow into major urban centers thereby swallowing up adjoining farm lands and farmers pushing back the forest boundaries to create new farm lands.

1.12.6 Infrastructural Development

In different parts of the country, forests are being destroyed to pave the way for establishment of industrial estates, housing estates, markets, airport, roads, telephone lines, power grid lines and commercial agricultural plantations and large scale farming.

1.12.7 Fuel Wood

There is widespread cutting of wood for fuel particularly in rural areas which depend on this source for up to 80% of total energy requirement annually. The annual consumption of wood in Nigeria is estimated to range between 80 and 88 million cubic metres of which 80% in consumed as fuel wood.

It is estimated that about 32 million cubic metres of fuel wood is consumed in the rural areas annually. The dependence of rural population (80% of the total populations) on fuelwood for their energy needs and the inefficient utilization of fuel wood have contributed to the serious resource depletion which is more noticeable in the arid zone of the country.

1.12.8 Uncontrolled Forest Fires

Of all the factors causing environmental degradation and depletion of resources, none has as much destructive effects as uncontrolled forest fires. Large tracts of forested land are laid bare within minutes as a result of bush fires, resulting in destruction of unquantifiable volume of forest resources. In short, the devastation of the forest ecosystem by fire is more thorough than that of any other single factor of forest degradation.

1.12.9 Over Grazing

The natural vegetation over most of the arid zone of Nigeria has been greatly modified by overgrazing by livestock. The region contains over 60 percent of the nation's livestock population in terms of cattle, goats, sheep and camels. As population increases, the number of livestock tend to follow a similar trend in order to meet the nation's protein requirement. The result is progressive reduction in vegetation cover and increase in resource depletion.

1.12.10 Poorly Organized Industrial Exploitation of Timber

Although the contribution of timber exploitation to resource depletion has not be properly quantified, it is certainly one of the most important factors in resource depletion. Most state governments have over the last decade seen the forest as a source of revenue to meet development needs. Hence forests are now more unsystematically exploited without restraint. A recent case in point is the unsustainable of exploitation of teak (*Tectona*

grandis) plantation in country for export just to generate revenue for the various state government. In addition, the high incidence of illegal felling of timber and under-reporting of produce extracted contribute greatly to resource depletion and loss of revenue.

1.12.11 Weak Institutional Capacity

There is weak institutional capacity to effectively implement sustainable forest management strategies. For example, most states do not have appropriate forest resources information and data for the development and or updating of management plans. Additionally, policies, obsolete legislation, lack of facilities, and shortage of manpower at Federal, State and Local Governments and communities levels are contributing factors.

1.13. The Need for a National Forest Policy

The forest estate of Nigeria is one of the most important and valuable national assets. Indeed it constitutes a renewable resource infinite in diversity and potential.

A concerted national effort is therefore imperative in order to salvage the forestry sector from the onslaught of stakeholders who are interested only in the revenue potential of the sector and greatly scared of the pertinent resource needs. A national approach to the problem is urgently necessary because forestry matters are not compartmentalized within political boundaries. Much more importantly, it should be stressed that most of the disasters that have occurred within Nigeria over the last five years are directly traceable to forest misuse. For instance, disasters such drought desert encroachment, floods, siltation, soil erosion, decreasing agricultural productivity and economic recession are, to some extent due to the poor management of our forest resources. These disasters are national in character and impact. Our forests constitute a natural environmental

buffer against most of the disasters. The problem therefore needs national solutions since the destruction of forests in one State could lead to disasters in neighbouring States. The supply and demand of forest resources in one State cannot and ought not to be pursued in isolation of the requirements of the other States of the federation. Therefore the national ecosystem of the country can only be improved upon if a national management policy is enunciated and takes into consideration the ecological potentialities of the various parts of the country and rationalizes those potentialities within a national planning perspective designed to enhance the welfare of all Nigerians.

Undoubtedly the ecological diversities of the forest estate provide the undisputed unifying factors for managing the forests through a national perspective. Nigeria cannot afford to be completely divested of its natural ecological heritage due to unintended political consequences of a failing system which can be rectified given the will and determination of the highest authority in the land whose sacred duty it is to pass on a well-managed economy and environment to posterity. In these circumstances, a national forest policy for Nigeria complemented by a Nigerian Forestry Law seems to constitute the appropriate strategy.

1.14. The Purpose of the National Forest Policy

Since forestry is a very profitable venture, the purpose of a National Forest Policy will be to encourage and support an aggressive establishment of plantations of economic trees of both exotic species, such as teak and indigenous species; and foster the redirection of development resources such that:

- forest lands are not allocated to other uses unless it is in the superior interest of the nation;
- conscientious efforts are made to expand the forest estate through new acquisitions by public and private agencies;
- the provision of forestry goods and services is vigorously pursued for and on behalf of all Nigerians;

- state boundaries do not in any way hinder the development of forestry projects, movement of forest produce and personnel as well as allocation of other resources and
- it is firmly agreed that the Nigerian forests constitute and are to be developed as a great national asset with an infinite socio-economic, environmental and welfare import.

1.15. The 1988 National Forest Policy

The extant national forest policy which is included within the document "Agricultural Policy for Nigeria" published by the Federal Ministry of Agriculture in 1988 recognized forestry as the management and utilization of forests as renewable natural resources.

It provides goals, targets and implementation strategies for the management, development and use of forests and their resources and products. The Policy is "demand-led" since its stated objective is the development of the forestry sector to meet the increasing national demand for forest products. This is to be achieved through the expansion of Nigeria's forest estate, by among other measures, increasing the amount of forest under conservation from 10 per cent to 20 per cent. The aims of the policy may be summarized as follows:

- (i) Consolidation and expansion of the forest estate, and its management for sustained yield,
- (ii) Forest conservation and protection of the environment
- (iii) Forest regeneration at a greater rate than exploitation
- (iv) Reduction of waste in utilizing both the forest and forest products
- (v) Protection of the forest from fires, poachers, trespassers and unauthorized graziers
- (vi) Encouragement of private forestry
- (vii) Creation of man-made forests for specific end uses
- (viii) Increase of employment opportunities
- (ix) Development of national parks and game reserves
- (x) Development of secondary forest products which are significant in the local economies, and encouragement of agro-forestry
- (xi) Cooperation with other nations in forestry development

Development of more efficient use of wood energy and encouragement of alternative energy sources to wood fuel.

CHAPTER TWO

2.0 GUIDING PRINCIPLES FOR THE NEW NATIONAL FOREST POLICY

The following general principles guide the New National Forest Policy. These principles are based on the government reform agenda, of poverty reduction and good governance. Specifically the principles are based on the need to:

- address the factors affecting the decline of the forest resources.
- streamline the contribution of forests to economic development and growth particularly the National Economic Empowerment and Development Strategy (NEEDS) whose four key strategies are – reorienting values, reducing poverty, creating wealth and generating employment.
- mobilize the community and civil society in forestry development.
- to promote partnerships with the private sector, the Non-Governmental Organizations (NGOs) and Community Based Organizations (CBOs).
- address transparency and in the tendering administration for forest concessions and to encourage long term concessions.
- accommodate the international forest policy initiatives, the implementation
 of the Intergovernmental Panel in Forests (IPF) and on Intergovernmental
 Forum on Forests (IFF) proposals for action for a sustainable forest
 management.
- Mainstreaming forestry activities into the Millennium Development Goals

2.1 National Objectives

The National Forest Policy is consistent with the national objectives and the principles guiding sustainable development. It focuses on managing the nation's forestry sector in a way that the forests would continue to deliver goods and services in perpetuity. In other words to meet the needs of this generation without compromising the rights of future generations.

2.2 Livelihoods and Poverty Reduction.

One of the aims of the present administration is the improvement of human livelihoods and poverty reduction. Since forestry is a very profitable venture, government will promote and support large scale establishment of plantations of appropriate economic species for the various ecological zones. The improvement of livelihoods should be a major goal in all the strategies and actions for the development of the forest sector so as to contribute to poverty reduction.

2.3 Food Security, Biodiversity Conservation and Environmental Services.

Forests and trees go beyond timber production. The multiple role of forests is given a focus in that forests contribute to food security, biodiversity conservation and environmental services in form of watershed protection and carbon sequestration to mitigate against global warning. The forest sector development policy should therefore safeguard the nation's biodiversity, food security and environmental services through effective conservation strategies of plants and animals.

Due cognizance should also be given to the health and security of the forest workers in order to ensure their productivity.

2.4 Partnership in Governance

This is a major paradigm shift in the forest arena in that the there is a decentralization of roles and functions. All stakeholders (public, private, NGOs, CBOs, and societies) are recognised as agents that would promote sustainable forest management. This new institutional relationships should enhance efficiency, transparency, accountability and professionalism. It would also build confidence in all forest stakeholders. It would also build confidence in all forest stakeholders.

(i) The role of Federal and State Governments.

The Federal and State Governments should withdraw from activities that can be carried out more effectively by the private

sector or other stakeholders, but maintain core functions of policy development and regulation.

(ii) The Role of Local Governments

More forest resources should be managed through developed responsibility wherever practical and advisable. There is therefore the need to build up the capacity of Local Governments to carry out this role.

(iii) The Role of the Private Sector

Private sector investment should be maximized in the development of the forest sector.

(iv) The Role of Communities and Farmers

The community participation in forest resources management should be actively encouraged for there lies the success of sustainable forest management. The communities are the closest to the forest resources.

(v) The Role of NGOs and CBOs

The NGOs and CBOs should be encouraged to strengthen the civil society to build capacity and grassroot participation. They would also help to develop the rights and responsibilities of forest users.

(vi) Gender and Equity

The active participation and affirmative actions of all women and men, young people and the elderly, and vulnerable and disadvantaged groups should be integrated into forest sector development.

(vii) Cultural and Traditional Institutions

Forest sector development should take into consideration cultural and traditional attributes and institutions.

2.5 National Forestry Legislation

One of the factors that militate against sustainable forest management is the absence of a National Forestry Act. Apart from using the provision of the Act to regulate forestry practices in Nigeria and to give also a legal backing for the National Forest

Policy, it would further enable us to meet the obligations on the treaties and conventions relevant to forestry development to which Nigeria is a signatory. The first ever National Forestry Act has also been evolved to back the policy and would soon be presented to Council.

2.6 International Obligation

Domestic legislation should also be developed to support the implementation of current and future international commitments that affect the forest sector.

2.6.1. Carbon credits.

Forest carbon pool of plantations and natural forests should be developed in compliance with the Clean Development Mechanism (CDM) of the Kyoto Protocol to be able to access the international market for forest based carbon credits.

2.7 Forestry Valuation

Environmental and social values should be used in the cost/benefit valuations when assessing strategies to implement the forestry policy.

2.8 Forest Sector Investment

Investment in the forestry sector is highly profitable and sustainable with much potential to contribute in greater quota to the national economic development goals and development strategy. Forest goods and services are tradable in the local, national and international markets.

CHAPTER THREE

3. FOREST POLICY STATEMENTS, OBJECTIVES AND STRATEGIES

3.1 Policy Objectives

The overall objective of the national forest policy is to achieve sustainable forest management that would ensure sustainable increases in the economic, social and environmental benefits from forests and trees for the present and future generation including the poor and the vulnerable groups.

Specifically, the objectives include the need to:

- (i) Increase, maintain and enhance the national forest estate through sound forest management practices.
- (ii) Address the underlying causes of deforestation, desertification including lack of policy support, market distortions, weak regulations and rural poverty.
- (iii) Promote and regulate private sector involvement in forestry development, and to create a more positive investment climate in the sector.
- (iv) Capitalize on the economic, social and environmental opportunities in forestry without undermining the resource base.
- (v) Encourage forest dependent people, farmers and local communities to improve their livelihood through new approaches to forestry.
- (vi) Ensure the survival of forest biodiversity and to balance this with the pressing development needs of the country.
- (vii) Rehabilitate and conserve key watershed forests.
- (viii) Promote and maintain the greening of the urban environment, and meet the increasing demand for forest products by urban centers.
- (ix) Ensure that improved tenure to land and tree acts as an incentive for individuals, communities and women in particular to invest in forestry.
- (x) Help private owners and communities to reserve land for forestry.
- (xi) Build capacity and systems for state and local government to engage actively in forest resources management and development.

- (xii) Apply an effective regulatory system to safeguard public interests under private sector forest management agreements to ensure adequate legal provisions for tenure in order to encourage long-term investment.
- (xiii) Develop partnerships or management agreement with local communities that improve forest management and alleviate poverty.
- (xiv) Strengthen and make best use of the capacity and reach of NGOs and CBOs in facilitating forest development.
- (xv) Develop and promote responsive, affordable, well-informed and decentralized forestry advisory services to farmers, communities and the forest industry.
- (xvi) Develop and support demand driven, well coordinated forestry research and training institutions and programmes.
- (xvii) Develop a forest sector programme that translates forest policy into action in a way that complements programmes in related sectors.

3.2 Strategies

To achieve sustainable forest management, some of the strategies to be adopted include:

- (i) The promotion of partnership with all stakeholders including the private sector, communities, and society, NGOs and CBOs.
- (ii) Decentralisation
- (iii) Promotion of community participation in forest resources management
- (iv) Encouraging the active participation of all women and men, young people and elderly and the vulnerable group in forest resources development.

The specific strategies are given under each of the principal policy elements discussed in this section.

3.3 Priority Areas for Sustainable Forest Management (SFM)

Polices are implemented through design and execution of programmes. The National Forest Policy lays special emphasis on thirty priority areas as the principal elements of the policy. These are:

- (i) Forest Management
- (ii) Community Participation : In and Outside Forest Reserves and Game Reserves
- (iii) Private Sector Involvement and Participation in Forest Development
- (iv) Biodiversity Conservation, National Parks and Games Reserves of Conservation Interest
- (v) Forest Industries
- (vi) Forest Administration
- (vii) Non-Timber Forest Products
- (viii) Environmental Services of Forests
- (ix) Watershed Forests and Wetland Management
- (x) Agroforestry
- (xi) Urban Forestry
- (xii) Poverty Alleviation and Food Security
- (xiii) Supply of Seeds and Seedlings
- (xiv) Forestry Research and Development
- (xv) Forest Fiscal Policy
- (xvi) Forest Fires
- (xvii) Pests and Diseases Control
- (xviii) National Tree Planting Campaign
- (xix) Woodfuels
- (xx) Drought and Desertification Control
- (xxi) Employment, Safety and Security of Personnel and Habitat
- (xxii) Gender Issues
- (xxiii) Youth Programme
- (xxiv) Manpower Development, Training and Capacity Building
- (xxv) Education and Awareness Creation

- (xxvi) Information and Data Base Management
- (xxvii) Land, Tree Tenure and Conflict Resolution
- (xxviii) Trade (Internal and External)
- (xxix) Sectoral Cooperation
- (xxx) National and International Cooperation
- (xxxi) Forest Sector Investment

3.3.1 FOREST MANAGEMENT

The forest estate shall be managed primarily for their:-

- (a) direct benefits which include:
- (i) maintaining an a sustainable supply of forest produce for internal consumption and exports; and
- (ii) increasing revenue to Government
- (b) indirect benefit such as:
 - (i) prevention of erosion;
 - (ii) maintenance of stream flow and water conservation;
 - (iii) protection of agricultural land,
 - (iv) guaranteeing food security; and
 - (v) preservation of aesthetic values.

3.3.1.1 Policy Statement:

Forest Management will be focused on achieving sustainable delivery of forest goods and services in perpetuity. Forest plantations will be established through out the country to supplement the supply of wood from the natural forests for domestic consumption as well as promotion for export, industrial uses and environmental conservation.

3.3.1.2 Objectives:

- (i) Increase the total area under sustainable forest management to 25% of the nation's land area.
- (ii) Develop principles, criteria and indicators for the sustainable management of forest resources.

(iii) Engender protection of the environment for social and economic benefits.

3.3.1.3 Strategies on Forest Reserve Management:

- (i) Consolidate the existing forest reserves.
- (ii) Provide comprehensive forest working plan for each Forest Reserve.
- (iii) Carry out periodic National Forest Resources inventory.
- (iv) Involve communities in the management of forest reserves with clearly defined roles and responsibilities.
- (v) Promote equitable benefit sharing and designate roles and responsibilities amongst stakeholders.
- (vi) Protect the Forest Estate from fire and encroachment.
- (vii) Encourage multiple-use concepts in the management of forest reserves.
- (viii) Classify forest areas according to utility and service classes, namely;
 - a. Productive
 - b. Protective
 - c. Recreational and cultural
 - d. Research and Education

3.3.1.4 Strategies on Plantation Establishment and Development.

- (i) Involve the private sector, communities and NGOs in large scale Forest Plantation establishment and development of economic trees.
- (ii) Create a National Forestry Development Trust Fund through donations, subscriptions, grants and levies on wood products, exports and import levies on industrial wood processing equipment.
- (iv) Promote the use of indigenous species for plantation establishment through tissue culture and other biotechnological means.

(v) Encourage Forest Industries to establish plantations to meet at least 60% of their raw materials' requirements.

3.3.1.5 Strategies on Areas Outside Reserves

Support to communities to develop capacities and partnership in the management of forest reserves and forests in areas outside forest reserves (free areas) through;

- (i) Capacity building.
- (ii) Infrastructural development.
- (iii) Access to markets and information.
- (iv) Grants and soft loans and other economic mechanisms.
- (v) The introduction of the principles of forest management in areas outside reserves.

3.3.1.6 Strategies on Agro-forestry

- (i) Support sustainable agro-forestry practices in free areas to enhance food security, rational use of resources, economic empowerment and poverty reduction.
- (ii) Encourage a wider adoption of agro-forestry at field level by other land using sectors.

3.3.1.7 Strategies on Establishment of Model Federal Forest Reserves:

- (i) Identify and classify fragile ecosystems within all ecological zones.
- (ii) Establish Federal Forest Reserves as models in sustainable forest management in different ecological zones.
- (iv) Promote the establishment of Federal Forest Reserves in marginal lands and derelict forest areas.

3.3.1.8 Strategy for Accessing Carbon Credits

Develop and promote a National Carbon Accounting/Auditing Scheme in accordance with the CDM of the Kyoto Protocol in order to access the international market for the sale of forest based carbon credits.

3.3.1.9 Strategy for Forest Valuation:

Develop techniques for appropriate valuation of forestry goods and services especially for Non-Timber Forest Products and the intangible benefits associated with the forests.

3.3.2 COMMUNITY PARTICIPATION: IN AND OUTSIDE FOREST RESERVES AND GAME RESERVES

Innovative approaches to community participation in forest management on both forest reserves and forest areas out side forest reserves will be promoted. This will address the disincentives associated with a protectionist approach to forest management whereby Government is regarded as the major stakeholder on forests management. It will also address the destructive practices associated with open access to forest resources.

The development of collaborative forest management will define rights, roles, and responsibilities of partners and the basis for sharing benefits from improved forest management. There will be a specific focus on wide stakeholder participation, collective responsibility and equity, and on improving the livelihoods of forest dependent communities.

3.3.2.1 Policy Statement

Encourage collaborative partnership with rural communities for the sustainable management of forest resources to ensure the supply of goods and services from the forest for the present and future generations.

3.3.2.2 Objectives

The objective is to promote sustainable forest management in forest reserves and forest resources outside the forest resources in what is usually referred to as free areas..

3.3.2.3 Strategies for the Implementation of the Policy

(i) Develop a supportive legal basis for tree tenure, access rights, and sharing of benefits from wood and non-wood forest products.

- (ii) Develop both the capacity and attitude changes in government and non- governmental organizations so as to create genuine partnerships for collaboration with local community groups.
- (iii) Develop a virile community, institutions to ensure transparent decision-making, the adequate representation and participation of women, men, and vulnerable groups and the equitable sharing of forest benefits and responsibilities.
- (iv) Strengthen the role of NGOs and CBOs in mobilizing communities and building capacity for implementing collaborative forest management.
- (v) Ensure resolution of conflicts relating to problem animals around protected areas.

3.3.2.4. Strategies on Forest Reserves

- (i) Guarantee and grant property and felling rights with regards to established plantations in Forest Reserves based on the principles of sustainable forest management.
- (ii) Grant tax relief and liberal financial arrangements as incentives for commercial tree growers during the gestation period.
- (iii) Formation of community or stakeholders forest committees to share management responsibilities.
- (iv) Provision of rural infrastructure and facilities e.g. roads and school.
- (v) Recognize and guarantee the rights of host communities to fair and equitable share of the revenue and participation in resource control and management.
- (vi) Encourage forest concessionaires, to provide rural infrastructures and facilities such as roads, schools and primary health institutions.

3.3.2.5 Strategies in Free Areas (Outside Forest Reserves)

- (i) Guarantee and grant tenural, property and felling rights to owners with regards to established plantations and individually owned trees without additional cost to government.
- (ii) Ensure strict adherence and compliance to environmental protection and management principles.
- (iii) Include social responsibility agreement in all arrangements relating to sustainable management of non- timber forest resources, involving the government and all other relevant stakeholders.

- (iv) Assist communities to achieve technical and institutional capacity for forest management.
- (vi) Encourage sustainable forest management on private lands and foster positive impact of forest dependent activities on the environment.
- (vii) Assist in the building and strengthening of the capacity of the communities by providing alternative sources of livelihood such as beekeeping and mushroom production.

3.3.3 PRIVATE SECTOR INVOLVEMENT AND PARTICIPATION IN FORESTRY DEVELOPMENT

Part of the reform agenda of government is the privatization policy by which government's role is reduced in activities that can be performed better by the private sector. A major role is envisaged for the private sector in forestry, particularly in the production and processing of wood products and in ecotourism, which are major employers and which require good business management. There have been a number of constraints to the active involvement of private sector in financing and skills development in forestry. These include among others:

- (i) the poorly coordinated and monitored administrative systems for the harvesting and movement of forest produce
- (ii) the absence of clear land and tree tenure arrangements, which has been a disincentive to commercial tree growing,
- (iii) the poor quality and occasionally unaffordable seed and seedlings for plantation development,
- (iv) market disincentive for investment and re-investment of profits,
- (V) conflicting guiding policies.

3.3.3.1 Policy Statement

Government would apply an effective regulatory system to safeguard public interests under private sector forest management agreements. It would also develop and apply high technical standards to private forestry, and ensure better legal provisions for tenure to encourage long term investment. Lastly effort would be made to create more positive attitudes in the public and private sectors to ensure effective partnerships between government and private businesses.

3.3.3.2 Objectives:

- (i) Encourage the development and management of forest estates.
- (ii) Increase the quality of forest resources for enhanced living standards and environmental protection.

3.3.3.3 Strategies on Land Tenure

- (i) States and communities should guarantee tenural rights to individuals and private investors for forest plantation development at agreed terms.
- (ii) Review land tenure system as a cross-sectoral issue by all land using sectors.

3.3.3.4 Economic and Social Incentives

- Define and allocate social and economic responsibilities to partners.
- (ii) Influence macro-economic responsibilities at all levels through:
 - Low interest rate regimes
 - Tax rebate
 - Liberal financial moratoria on forestry investments

3.3.3.5 Strategies on Benefit Sharing

- (i) Evolve acceptable formula for benefit sharing.
- (ii) Support mechanisms to enable participants mutually identify and agree on roles and responsibilities as well as on benefit sharing formulae.

3.3.3.6 Strategies on Tree Ownership

- (i) Guarantee tree ownership rights within the enabling laws, traditional practices and customs.
- (ii) Subject forest plantations to sustainable forest management principles.

(iii) Support mechanisms for mediation between stakeholders through active involvement of government, Non-government Organisations, Community Based Organisations and the civil society.

3.3.4 BIODIVERSITY CONSERVATION, NATIONAL PARKS AND GAMES RESERVES OF CONSERVATION INTEREST.

The Government is committed to the conservation of Nigeria's rich forest biodiversity to meet the needs and aspirations of present and future generations. The government will promote the conservation and rational utilization of representative samples of all ecosystems and species in the country.

The national biodiversity conservation strategy will continue to be based on a system of Protected Areas, including Forest Reserves, National Parks and Game Reserves. In recognition of the fact that the local communities must share from the benefits of these Protected Areas, there must be a meaningful participation of these communities in their management. Efforts to safeguard biodiversity in private forests and to improve agricultural biodiversity through farm forestry initiatives must be supported.

The government is a signatory to a number of international agreements and Conventions on forest issue covering conservation, access to genetic resources, trade in endangered species and cross border cooperation, and it will continue to support and implement these obligations.

3.3.4.1 Policy Statement:

The nation's rich biodiversity shall be conserved to provide essential goods and services for sustainable development.

3.3.4.2 Objectives:

- (i) To improve and manage species composition (flora and fauna).
- (ii) To promote scientific studies, research, conservation education, environmental protection and eco-tourism.

- (iii) To engender confidence and cordial relationship between host communities, government and end users.
- (iv) To promote host community's participation and empowerment.

3.3.4.3 Strategies to Support, Improve and Sustainably Manage Species Composition (Flora and Fauna):

- Identify, delineate and inventorize species and sites of conservation interest.
- (ii) Develop in-situ conservation areas as National Parks, Game Reserves, Strict Nature Reserves, Sanctuaries and Cultural Heritage Centres.
- (iii) Develop ex-situ conservation areas Zoological and Botanical Gardens, which are to serve as centres for genetic improvement of endangered species.
- (iv) Promote Herbarium/Arboretum establishment support the establishment and development as both national and state priority.
- (v) Develop transparent mechanisms for responsibility and benefit sharing among Federal, States and Local Governments and Communities and other stakeholders.
- (vi) Enforce forestry legislation including laws on export of flora and fauna.
- (vii) Initiate the development and dissemination of relevant awareness and education materials on biodiversity conservation.

3.3.4.4 Strategies on Host Communities-Partnership and Empowerment

Establish partnership, effective liaison and consultation with the host communities around protected areas and offer conservation training, with a view to providing employment, alleviating poverty and effective empowerment for decision-making.

3.3.5 FOREST INDUSTRIES

There is an active and highly competitive domestic market in wood products particularly in the construction and manufacturing sectors. However, various disincentives and market distortions are causing

inefficiencies, an excessive waste of resources and prior investment in the forest industries.

- There is waste due to inefficient machinery. Conversion rates during processing as low as 40%.
- Timber is currently undervalued. The royalty rates charged on timber do not reflect its full value in terms of the forest goods and services at requirements. The charges are administratively fixed. This has led to low revenues for re-investment in forest management, and weak incentives to improve efficiency in processing.
- Poor regulations has led to an increase in illegal harvesting that is undermining the legal markets by distorting prices, and further reducing government revenues.
- Profits made by private investors are switched to other sectors because of low confidence investors have in the forest sector. Serious investors are reluctant to commit funds when the investment climate is risky, when administrative procedures are not transparent especially in concession allocation, and when tenure is so uncertain.
- The development of wood based products through secondary and tertiary processing measures low, thus reducing economic opportunities and incentives to reduce wood wastage.

The private sector will play the major role in developing and managing the forest products processing industries and will capture the potential for value addition through high quality processing. The role of government is to facilitate and regulate these activities. The State Government will be encouraged to develop and maintain a strong regulatory framework which will control illegal practices; monitor best practices measure environmental and social impacts, and collect dues. The governments at Federal and State level will also create a positive investment climate to encourage private investment in the processing industry.

3.3.5.1 Policy Statement:

To encourage a sustainable management and utilization of forest resources and to guarantee the perpetual supply of raw materials to the forest industries.

3.3.5.2 Objectives:

- (i) To have a forest industry that embraces and practices forest resource exploitation in a way that promotes sustainable forest management and utilization.
- (ii) To develop strategies for waste reduction and utilization at all stages of industrial activities.
- (iii) To ensure that forest industry operations are carried out in an effective, efficient and environmentally friendly manner.
- (iv) To enhance the value of products from the forest.
- To promote activities that will generate and sustain increased job opportunities.
- (vi) To involve forest industries in forest plantation development

3.3.5.3 Other Strategies on Efficiency in Forest Harvesting, Conversion and Production

- (i) Enforce pre-harvesting inventory as well as production of and compliance with logging plans and safety guidelines.
- (ii) Enforce the need to plant and nurture a minimum of four seedlings for every one felled by tree takers.
- (iii) Enforce the use of trained personnel and appropriate forest harvesting tools and equipment.
- (iv) Adopt appropriate forest harvesting/low impact logging techniques.
- (v) Adopt appropriate log transportation and haulage systems to minimise damaged in the residual stands and prevent erosion.
- (v) Reduce illegal forest activities through effective education, policing and forest protection.

(vi) Encourage the establishment of integrated and Small-Medium Enterprise (SME) forest industries.

3.3.5.4 Grading Rules, Quality Control, Certification, Log Tracking, Etc.

- (i) Develop grading rules and apply these rules to ensure the production of value added high quality forest products acceptable in local and international market.
- (ii) Ensure sustainable forest management at all times.
- (iii) Develop certification process for SFM that includes effective log tracking to ensure the acceptability of export wood products in the international market.

3.3.5.5 Strategies on Training in Sawmilling, Saw Doctoring and equipment/tools maintenance.

- (i) Resuscitate and upgrade existing training and maintenance/workshop facilities in the country to enhance efficiency in wood conversion, treatment, preservation and maintenance of sawmilling equipment/tools.
- (ii) Recruit and train competent staff for sawmilling operations.

3.3.5.6 Strategies on Utilisation of Lesser-Used Species.

- (i) Conduct research on mechanical and physical properties of lesser used species to promote their utilisation.
- (ii) Conduct research and develop appropriate machines that efficiently convert smaller diameter logs.

3.3.5.7 Strategies on Safety and Forest Health.

- (i) Train trees fellers in appropriate felling techniques to minimize the occurrence of forest accidents.
- (ii) Provide appropriate tools, outfits and first aid kits for workers in the forests and the sawmills.
- (iii) Consider ergonomic principles in the design and layout of mills and forest harvesting.
- (iv) Observe workmen compensation in accordance with the International Labour Organisation (ILO) rules.

3.3.5.8 Capacity Utilisation and Resource Exploitation.

- (i) Provide enabling environment for sourcing further investments in the industry to import logs for processing.
- (ii) Embark on massive afforestation programme with the use of fast growing species to provide raw material for the industry, in the medium term
- (iii) Embark, along with industries, on massive afforestation and reforestation programme with the use of fast growing species to produce raw materials for the industries in the long term.

3.3.5.9 Strategy on Value Added Downstream Products.

Encourage the integration of primary, secondary and further downstream wood processing sectors in order to add value and conserve our forest resources.

3.3.5.10 Strategy on Waste and Residues Utilization.

Promote the use of wood residues for briquetting, particleboard, charcoal, power generation, etc.

3.3.6. FOREST ADMINISTRATION.

The effectiveness of a forest policy depends on the energy, drive and dedication of the National Forest Service. In bridging the gap between policy formulation and various agents of implementation in the country, the Federal Department of Forestry shall play a leading role in forest management throughout the country.

The Federal Government recognizes that the Forest Estate is an invaluable national asset, the development and economic benefits of which shall always be in the overall interest of the nation.

Whereas, the State Forest Services have been organized into administrative units, the growing importance of plantation forestry and the emphasis on economic development as outlined in this document require a more dynamic organization. The Federal Government shall always make adequate provisions for the employment of well-trained forestry

personnel of all cadres and for the supply of modern equipment and other essential needs of the National Forest Service. The ultimate aim shall be an intensive administration of the Forest estate under a corps of knowledgeable managers and specialist officers.

3.3.6.1 Policy Statement:

The new policy is aimed at sustainable management of the forest resources of Nigeria and maintenance of environmental stability for the present and future generations. To this end, Government will establish and maintain a competent forest administration manned by efficient forest officers at Federal and State level.

3.3.6.2 Objectives:

To modernize forestry administration through improved planning, decisionmaking and management capability for the overall achievement of satisfactory performance of policy objectives and targets.

3.3.6.3 Strategies Institutional Management and Empowerment at all Levels

- (i) Strengthen the administrative capacities at the Federal, State and Local Government levels with clearly defined mandates in terms of responsibilities, staffing, training and funding.
- (ii) Decentralize decision-making process to involve stakeholders at Federal, State, Local Government, Private Sector and Communities levels.
- (iii) Establish Forestry Trust Fund at Federal, States, and Local Government levels.
- (iv) Define roles and responsibilities for all stakeholders.

3.3.6.4 Strategies on Communities and Private Sector Empowerment:

The important role that forests play in rural livelihood, especially of the poor, is generally well recognized. It is generally perceived that

widespread deforestation has led to environmental degradation, and that government acting alone would not be able to reverse the trends. Of particular concern was reduced access by local communities to forest products, such as fuelwood and fodder that were critical to the maintenance of rural livelihoods. The promotion of community participation in forest resources management is therefore an identifiable implementation strategy that would address widespread forest loss and its consequent environmental degradation and negative impact on rural livelihoods. One of the underlying articles of faith of community forestry is that human well being will be enhanced.

- (i) Involve communities, private sectors, Non-Governmental Organisations, civil society, etc, in forest administration.
- (ii) Strengthening Forestry Unit at the Local Government level to administer local government forestry matters.

3.3.6.5 Strategies on Roles and Responsibilities:

The following roles and responsibilities are assigned to the various stakeholders in the forest arena in support of sustainable forest management.

(i) Federal Government should be responsible for:

- Advisory Services.
- Policy Formulation and Legislation on national forestry issues.
- Manpower Development and Training.
- Research and Development.
- Monitoring and Evaluation, Coordination and Review.
- International Cooperation (Agreements, Conventions, Treaties, etc).
- Natural Resources Assessment Accounting and Auditing.
- Establishment and Management of model Federal Forest Reserves.

- Public Awareness Creation and enlightenment.
- Enforcement of the National Forestry Act.

(ii) State Forestry Service shall be responsible for:

- Consolidation of New and Existing Forest Reserves.
- Management of the Forest Estate in collaboration with the Local Government, NGOs, Communities, and civil society.
- Training of Personnel.
- Inventory of Resources.
- Awareness Creation and Public Enlightenment.
- Enforcement of Forestry Laws and Regulations.
- Monitoring and Evaluation.
- Establishment of Plantations, Demonstration and Pilot Projects.
- Provision of extension services.
- Input service delivery.

(iii) Local Government Authority should be responsible for:

- Local Land-Use Planning and Ecosystem Planning to ensure Sustainable Management of the Forest Resources.
- Forest Protection.
- Community Mobilization.
- Enforcement of forestry laws and Bye-laws.
- Monitoring and Evaluation, Coordination and review.
- Establishment of Demonstration Plots.
- Community Awareness Campaigns.
- Establishment of woodlots, roadside and amenity plantings.

(iv) Community level, roles should be:

- Formation of Cooperative Groups.
- Awareness Creation among members.
- Participation in the management and protection of Forest Estates and non-reserved forest areas.

3.3.7 NON-TIMBER FOREST PRODUCTS (NTFPs)

Forest and trees provide an appreciable source of edible fruits and foods, fodder, medicine and cash income for many rural people. In Nigeria, over 150 indigenous woody plants from the various vegetation zones have been identified as yielding edible products for man and animals. For many people in Nigeria the forests play the role of a pharmacy from which they obtain plant parts for the treatment of their ailments. Economic products such as cane/rattan used for the production of baskets, chairs and other furniture, raphia products for the production of mats and ropes; wrapping leaves; fish poison (for fishing); chewing sticks; and honey are obtained from the forest.

3.3.7.1 Policy Statement:

Promote the development and conservation of NTFPs in all the ecological zones for the benefits of the present and future generations and to increase NTFPs' contribution to the national economy.

3.3.7.2 Objectives:

- (i) To promote community partnership in NTFPs management.
- (ii) To mobilise the community for sustainable management, multiplication, packaging and marketing of NTFPs.

3.3.7.3 Strategies

(i) Undertake surveys and studies to identify and assess the distribution and economic viability of NTFPs.

- (ii) Carry out in situ and ex situ conservation, resource valuation, conscious management and development of NTFPs.
- (iii) Carry out multiplication/breeding of NTFPs for enhanced economic production, food security and development of viable opportunities in the rural community.
- (iv) Sustain training and empowerment building e.g. (facilitates the formation of forestry committees, action groups and watch groups).
- (v) Facilitate and improve local processing and packaging of NTFPs as well as identify other alternative uses.
- (vi) Create improvement in the socio-economic well being of the communities.

3.3.8 ENVIRONMENTAL SERVICES OF FORESTS

The many valuable ecosystem services provided by forests, including climate stabilization, carbon storage, protection of hydrological functions, and biodiversity conservation are now gaining some attention. Unfortunately our forests are under severe threat. The rate of deforestation in Nigeria is put at about 350,000 ha to 600,000 hectares per annum. This loss of forests has been accompanied by a loss of many serviceable services that forests provide. The three main categories of benefits to be focused are as follows:-

- Watershed Protection: Forests play an important role in regulating hydrological flows and reducing sedimentation. Changes in forest cover can affect the quality and quality of water flows downstream, as well as their timing. (see policy on watershed management).
- **Biodiversity Conservation**: The forest estates harbour a significant proportion of the nation's biodiversity, loss of habitat, is a leading cause of species loss (see policy on forest biodiversity).
- Carbon Sequestration: Standing forests hold a large carbon stocks and growing forests sequester carbon from the atmosphere.

3.3.8.1 Policy Statement on Protection

Government will recognize and emphasize the protective role of forests in watersheds, buffer zones around rivers and hills so as to prevent water and wind erosion as well as siltation of watercourses and as carbon sequesters.

3.3.8.2 Objectives:

- (i) To ensure the capacity of forests to protect watersheds, buffer zones around rivers and hills, prevention of water and wind erosion, siltation of water courses and support for carbon sequestration.
- (ii) To ensure the capacity of the forests to provide recreational facilities and aesthetic values.

3.3.8.3 Strategies:

- (i) Enlightenment and educate on protective roles of forests and prohibitive areas
- (ii) Enforce relevant legislation.
- (iii) Encourage the formation of environmental vanguards from the host communities.
- (iv) Promote National Tree Planting and Agro-forestry Practices outside forest reserves in order to increase the area under forest cover.
- Encourage the development of affordable alternatives to woodfuels.

3.3.8.4 Policy Statement on Social Forestry

Evolve mechanisms to access and promote the social functions of forestry in communities.

3.3.8.4.1 Objective:

- (i) To promote social forestry.
- (ii) To empower the local communities through training and other support to be able to manage their forest resources.

3.3.8.4.2 Strategies:

- (i) Undertake amenity plantings such as woodlots, strips, and roadside plantings as well as parks and gardens establishment for recreational and aesthetic values.
- (ii) Provide and develop marketable environmentally friendly recreational facilities.
- (iii) Encourage the development of affordable alternatives to wood fuels

3.3.9 WATERSHED FORESTS AND WETLANDS MANAGEMENT

Forests are commonly associated with a range of environmental services delivered at a watershed and wetlands, including:

- Regulation of water flow that is maintenance of dry season flows and flood control.
- Maintenance of water quality that is minimization of sediment load, nutrient load (e.g. of phosphorus and nitrogen) chemical load, and salinity.
- Control of soil erosion and sedimentation and enhancement of productivity.
- Reduction of land Stalinization and/or regulation of ground water levels; and
- Maintain of aquatic habitats (e.g. reductions of water temperature through shading rivers or streams, ensuring adequate wood debris and habitant for aquatic species).

3.3.9.1 Policy Statement

Watershed protection forests will be established, rehabilitated and conserved, while all wetlands will be monitored and managed in accordance with international standards.

Government will promote the rehabilitation and conservation of forests that protect the soil and water in the nation's key watersheds and river systems. Achievements on watershed protection through forestry will

result from the adoption of appropriate farm forestry methods on degraded private lands, from the improved management of natural forests on Lilly private lands, and from the restoration of degraded hills on public lands.

3.3.9.2 Objectives

Strategies for the implementation of this policy statement will include:-

- (i) Promote the rehabilitation of degraded forests in water catchments areas and bare hills through private, community and farm forestry initiatives.
- (ii) Develop and promote guidelines on the management or riverside forests.
- (iii) Develop and promote awareness, educational and community mobilization programmes to promote good integrated land use practices in hilly areas, and protected watersheds from degradation.

3.3.9.3 Strategies:

- i. Identify and delineate protective forest cover along the rivers and water bodies.
- ii. Reduce human encroachment through public enlightenment.
- iii. Encourage the planting and replanting of trees in degraded watershed and catchment areas.
- iv. Provide enlightenment and education campaign on the protective roles of the forest.
- v. Carry out inventories of wetlands and draw up management plans for wetlands.
- vi. Review and enforce laws to adequately protect watersheds and catchment areas.
- vii. Facilitate the formation of environmental vanguards by host communities.
- viii Promote National Tree Planting Campaigns.

3.3. 10 AGRO-FORESTRY

Agroforestry focuses on the role of trees on farms and in agricultural, landscapes to meet the triple bottom line of economic, social and ecological needs in today's world to the achievement of virtually all of the Millennium Development Goals.

3.3.10.1 Policy Statement:

Agroforestry practices would be aimed at increased wood production, food security, and socio-economic development as well as provide environmental protection.

3.3.10.2 Objective

The objective of the agroforestry policy is to materially address:

- (i) Helping the eradication of hunger through basic, pro-poor food production systems in disadvantaged areas based on agroforestry methods of soil fertility and land regeneration.
- (ii) Lifting more rural poor from poverty through market-driven, locally led tree cultivation systems that generate income and build assets;
- (iii) Advancing the health and nutrition of the rural poor through agroforestry systems.
- (iv) Conserving biodiversity through integrated conservation development solutions, based on agroforestry technologies, innovative institutions, and better policy.
- (v) Protecting watershed services through agroforestry, based solutions that enable the poor to be rewarded for their provision of these services.
- (vi) Assisting the rural poor to better adapt to climatic change, and to benefit from emerging carbon markets, through tree cultivation and
- (vii) Building human and institutional capacity in agroforestry research and development.

3.3.10.3 Strategies:

- (i) Encourage the planting of improved varieties of indigenous multipurpose trees for income generating and soil improvement.
- (ii) Promote the production and supply of quality seedlings of Timber and Non-timber trees to farmers for cultivation.
- (iii) Federal, State and Local Governments to assist individuals, communities and cooperate bodies to obtain land for agro-forestry in the buffer zones around the Reserves.
- (iv) State and Local governments to provide assistance to individuals and communities in land preparation, planting and maintenance of cultivated estates for at least the first rotation of the species at agreed terms.
- (v) Federal and State Governments to assist farmers have access to markets for better prices for their commodities.

3.3.11 URBAN FORESTRY

The government is committed to improving the livelihoods and well being of urban people by supporting urban forestry and improving the urban landscape and environment. The private and Non-governmental Organizations, the civil societies will be encouraged to play a major role in the development of urban forestry. They would be given adequate support and incentives, in collaboration with urban/municipal authorities.

Urban and peri-urban forests improve the quality of life in both tangible and intangible ways. The consumable products include firewood, food, feeder and poles. Invisible benefits include the reduction of air pollution, and noise, the control of water run off and soil erosion, and the enhancement of the landscape for recreation. With continued and accelerated urbanization in the country, the demand for these goods and services will grow, and so too will the role of urban and peri-urban forestry.

Peri-urban and urban forestry could be private, government and municipal land. They may generate commercial or non-commercial revenue, and they may be of benefit to peri-urban farmers or the urban public.

3.3.11.1 Policy Statement

Urban forestry will be promoted in order to provide aesthetics, recreational, social and economic values and benefits to the people.

3.3.11.2 Objectives

To promote and maintain the greening of the urban environment, and to meet the increasing demand for forest products by urban centres.

3.3.11.3 Strategies:

- i. Encourage roadside and amenity plantings.
- ii. Encourage the enactment and enforcement of Town Planning Regulations as they affect the establishment of green areas.
- iii. Encourage the establishment of botanical and zoological gardens in urban centres.
- iv Encourage the development and maintenance of urban ornamental and amenity nurseries

3.3.12 POVERTY ALLEVIATION AND FOOD SECURITY

Forest resources contribute to livelihoods, and can complement other key components of poverty reduction through food production, education and primary health care. The poor people get subsistence goods such as fuelwood, medicines, wood for building, bushmeat, fodder, mushrooms, honey, edible leave, roots, fruits from trees and forests. In addition arts and crafts, timber and other wood production are got from the forests. In direct benefits such as land for other uses, social and spiritual sites, environmental services including watershed protection and biodiversity conservation are also got from trees and forests.

3.3.12.1 Policy Statement:

The Forest Policy aims at ensuring that forests, apart from providing timber, also provide other arrays of goods and services on sustainable basis in order to improve human livelihoods.

3.3.12.2 Objectives:

- (i) Encourage the expansion of forest reserves to meet the needs of the rural people.
- (ii) Sustainable management of forest resources.
- (iii) Reducing rural urban migration and enhancing income generation through the promotion of scientific exploitation of non-wood forest products and engaging the rural populace in sustainable agroforestry practices.

3.3.12.3 Strategies:

- (i) Participatory approach in the establishment and management of forest reserves, community woodlots, shelterbelts etc.
- (ii) Promotion of the establishment of multipurpose tree species, including Gum Arabic, Shea butter, Parkia, breadfruit, and medicinal plants species.
- (iii) Promotion of Agro-forestry practices for food security (Apiculture, Mushroom production, Snail breeding and Wildlife domestication).
- (iv) Establishment of co-operatives and ensuring appropriate pricing of NTFPs

3.3.13 SUPPLY OF SEEDS AND SEEDLINGS

It is recognized that the success of an aggressive tree growing in the country depends on the supply of tree planting stock that is productive, stable and well adapted to local conditions. The development of adequate supplies of high quality tree seeds and improved planting stock will be promoted to meet the needs of all stakeholders.

Seed procurement, tree improvement and genetic resource conservation will be promoted. The government will build capacity for research and development in these areas. Priority indigenous tree species that are endangered will be conserved as sources of tree seed and planting material.

The private sector has a major role to play in the collection and distribution of tree seeds and planting stock. The Government will help to build capacity in the private sector to enable effective seed supply and marketing, and develop mechanisms to ensure high standards and quality control.

3.3.13.1 Policy Statement

Innovative mechanisms for the supply of high quality tree seed and improved planting stock will be developed. This will ensure regular supply of improved and viable seeds and other planting stocks.

3.3.13.2 Objectives

- i. To produce enough viable qualities of planting materials for afforestation and reforestation programmes.
- ii. To enhance forest productivity.
- iii. To ensure the success of the National Forest Programme.

3.3.13.3 Strategies for the Implementation of this Policy Statement will include:

- (i) Determine and monitor national seed demand and supply.
- (ii) Identify, establish and manage seed sources for priority tree species.
- (iii) Produce, market and promote the use of high quality tree seed.
- (iv) Support linkages to national, regional and international research and development to improve tree seed and access modern germ plasm propagation techniques.

- (v) Develop standards and guideline for seed collection, handling and distribution to ensure quality control.
- (vi) Develop capacity for the supply and distribution of tree seed through the private sector.
- (vii) Build capacity in the private sector for tree nursery management.
- (viii) Ensure that the special needs of the different ecological zones for seed supply and nursery management are met.
- (ix) Carry and gene conservation of high priority, endangered indigenous tree species to guarantee sustained availability.

3.3.13.4 Other Strategies:

- i. Establishment of seed orchards and banks.
- ii Strengthening and improvement of existing nurseries and establishment of new ones.
- iii. Encourage the improved breeding of indigenous trees species.
- iv. Enhance capacity building (staff training and retraining).
- v. Encourage the establishment of community and school nurseries for the supply of seedlings at local levels.

3.3.14 FORESTRY RESEARCH AND DEVELOPMENT

In all the various field of forestry and related land management and use, the continuous pursuit of new knowledge is highly essential. Such knowledge can be obtained through a sound and comprehensive research programme. The Government is convinced that the ultimate success of its policy depends largely upon the practical application of the results of scientific research to the task of the development of the forest and its uses.

Government shall maintain its training schools to provide practical training in forestry at the sub-professional level and to provide training for members of the timber trade in various aspects of wood utilization.

Government shall also encourage and foster the identification of professional and post-graduate training for tackling forestry problems at all times.

3.3.14.1 Policy Statement:

Forestry Research and Development will be aimed at promoting intensive research and development in areas of forest conservation, biotechnology, silviculture, agro-forestry, resource assessment, wildlife management, socio-economic issues and optimum utilization including the development, exploitation and marketing of NTFPs.

3.3.14.2 Objectives:

To develop appropriate technology for research in various aspects of forestry, wildlife management and forest products utilization.

3.3.14.3 Strategies:

- (i) Promote intensive research and development in all areas of forestry development.
- (ii) Identify research needs of relevant stakeholders.
- (iii) Facilitate experience sharing.
- (iv) Fund research with a percentage of the tax paid by forest related industries and on export of logs, to be paid into a special account designated as Forestry Tax Fund. Also, fund research from the Ecological Funds in addition to other budgetary allocations.
- (v) Train forestry staff at all levels to enable them to enable them apply the results of research to the best advantage.

3.3.15 FOREST FISCAL POLICY

Both the forest fiscal policies and policies in other sectors of the economy affect sustainable forest management practices. The Nigerian forest revenue system is characterized by low product price levels, and

inadequate monitoring, which results in widespread tax evasion, illegal logging and waste. The various states in Nigeria operate different types of charges. These charges also vary from state to state per tree depending on the species.

3.3.15.1 Policy Statement

Government will ensure that the forest revenue system is reformed in order to create an enabling environment for sustainable forest management.

3.3.15.2 Objectives

- (i) To promote a sustainable forest management
- (ii) To promote equity in the distribution of forest benefits to the community
- (iii) Promotion of rural development and stability of the forest resource.

3.3.15.3 Strategies

- (i) Involve all stakeholders in decision-making about forest revenue system formulation, revenue collection and sharing
- (ii) Harmonize existing sectoral policies to elimination and resolve areas of conflict.
- (iii) Provision of a tariff system for forestry goods in a way or that reflects that true market value
- (iv) Ensure transparency in the administration of forest concessions
- (v) Encourage long tenure for concessionaires to ensure sustainable forest.

3.3.16 FOREST FIRES

Fire is by far the greatest danger to forests. Wild fire destroys large proportion of the national forest estate every year, with the attendant loss of flora and fauna and the rich biodiversity. The destruction negatively

impacts on the ecosystem and the economy. It also contributes to global warming. The Government would study all methods of forest fire prevention, detection and control which have been successful in other parts of the world, and apply them whenever possible in Nigeria. The provision of adequate communications in forest is an essential part of protection against fire.

3.3.16.1 Policy Statement:

Evolve effective and efficient measures for prevention, control and management of forest fires.

3.3.16.2 Objectives:

- i. Protect forest estates from forest fires and bush burning.
- ii. Enhance better forest fire management
- iii. Ensure effective forest fire control and prevention.

3.3.16.3 Strategies

- i. Establish a National Forest Fire Service as distinct from the existing fire services in the country.
- ii. Public awareness and education on the dangers associated with forest fires.
- iii. Insure forest estates against bush burning and forest fires.
- iv. Create enabling environment for access to the facilities of the National Agricultural Insurance scheme for forest fire insurance.
- v. Capacity building and training of forest personnel in forest fire management.

3.3.17 PESTS AND DISEASES CONTROL

National forests in any area exist in dynamic equilibrium with their environment, including the insects. In normal, balanced forest, insects generally limit their activities to trees or branches that are weak, dying or

dead. However there are occasions when there is dis-equilibrium and epidemic occurs. Harmful insects are of many types and no part of the tree is immune from attack. The principal types include stem borers, defoliators (consuming the leaves) and others infest the fruits, cones or seeds.

Fungal diseases though may also manifest in natural forests and plantations. Constant vigilance is required to detect the first signs or symptoms as early as possible.

3.3.17.1 Policy Statement:

The Nation's Forest Estate shall be protected from pests and diseases.

3.3.17.2 Objectives:

- i. To ensure healthy growth and high productivity of forest resources.
- ii To promote the quality of forest goods and services.

3.3.17.3 Strategies:

- i. Detect epidemics in their incipient stage
- ii. Check and correct the ecological imbalance that might have caused the epidemics.
- iii Inspect nursery stock for insects and disease before transporting to planting site.
- iv. Apply phyto-sanitary methods by clearing undesirable vegetation, burning or application of herbicides.
- v. Apply biological or chemical control as the case may be.
- vi. Encourage and strengthen networking among various research institutions both National and International.
- vii. Procure and apply appropriate pesticides and equipment for pests and diseases control.
- viii Adopt environmental friendly techniques for pests and diseases management and control.

- ix Strengthen capacities for pests and diseases control.
- x. Rapid response to outbreak of pests and diseases.
- xi. Promote and sustain forestry hygiene.

3.3.18 NATIONAL TREE PLANTING CAMPAIGN

The National Tree Planting Campaign (NTPC) was first introduced in 1981 to mark the World Environment Day which is observed on June 5 every year. The ceremony involved the planting of a commemorative tree at the launching site by the highest office of the land (Mr. President). There is a general public misconception that the NTPC is a programme for the establishment of large-scale forest plantations all over the country. The position is that NTPC is a strategy devised by Government to sensitise the people and create public awareness on the need for forest conservation and to impart tree planting culture in the citizenry in recognition of the roles forest and trees play in our environment, and in the general well being of our people. It was therefore not designed to replace the actual plantation programmes of Federal, State and Local Governments. It is to serve as a vehicle to give support and impetus to natural afforestation efforts.

3.3.18.1 Policy statement:-

National Tree Planting Campaign Programme shall be reviewed from time to time to ensure that the citizenry imbibe the culture of tree planting in their homesteads, farmlands and developmental areas.

3.3.18.2 Objectives:

- (i) To conserve and protect the environment.
- (ii) To produce raw materials for forest based industries.
- (iii) To create awareness on the effects of deforestation, erosion, desertification and the need to plant more trees.

(iv) To massively re-vegetate the environment

3.3.18.3 Strategies:

- (i) Provision of adequate quantities of quality seedlings of economic and ornamental tree seedlings.
- (ii) Enforce that each urban household plants a minimum of two trees in addition to planting of ornamentals
- (iii) Effective extension services delivery
- (iii) Enlightenment programmes
- (iv) Development of maintenance culture for planted trees.

3.3.19 WOODFUELS

Fuelwood accounts for a large population of all energy consumption in many developing countries. In Nigeria, about 75 – 80 per cent of the population rely on fuelwood for their domestic energy supply. The annual consumption of wood in Nigeria is estimated to range between 80 – 88 million m³, out of which 80% is consumed as fuelwood. About N1,666 billion of fuelwood is consumed annually in Nigeria.

As deforestation increases, fuelwood becomes scarce particularly in the arid and semi arid zones of the country. As the supplies of fuelwood dwindle, villagers mainly women and children have to spend more time searching for wood. There is therefore the need to make the fuelwood available, and affordable.

3.3.19.1 Policy Statement

The establishment and sustenance of woodlots at all levels shall be encouraged and supported through the provision of quality and improved seedlings, and other incentives. The development of affordable and readily available alternatives to wood fuels will be encouraged so as to reduce the pressure on the forests.

3.3.19.2 Objectives:

- (i) To ensure the sustainable supply of wood fuels.
- (ii) To conserve and protect the environment.
- (iii) To provide income generating opportunities to communities.
- (iv) To promote viable alternatives to wood fuels.

3.3.19.3 Strategies:

- (i) Communities and private sector should be encouraged to establish and maintain woodlots to supply fuel woods on sustainable basis.
- (ii) Sustain research on fast growing plant species and affordable alternative sources of energy.
- (iii) Sustain advocacy and awareness campaigns on effects of deforestation.
- (iv) Discourage indiscriminate felling of trees for fuel wood supply should be sustained at all levels.
- (v) Facility the provision of subsidy on available alternative energy sources.
- (vi) Promote the development of cheaper and readily available alternatives to wood fuels.

3.3.20 DROUGHT AND DESERTIFICATION CONTROL

Desertification is a gradual process by which the productivity of land is reduced. Extension areas of productive lands (about 12% of the total land area of Nigeria) are affected by this problem. The areas lie above latitude 11°N. The eleven states that are affected are referred to as frontline states and includes Adamawa, Bauchi, Borno, Gombe, Katsina, Kano, Kebbi, Jigawa, Yobe, Sokoto and Zamfara states.

The guiding principles of national drought policy should be to:

 Favour preparedness over insurance, insurance over relief, and incentives over regulation.

- Set research priorities based on the potential of the research results to reduce drought impacts.
- Coordinate the delivery of federal services through cooperation and collaboration with non federal entities.

The policy requires a shift from the current emphasis on drought relief. It means we must adopt a forward-looking stance to reduce Nigeria's vulnerability to the impacts of drought.

Preparedness – especially drought planning, plan implementation, and proactive mitigation must become the cornerstone of the national drought policy.

The goals of the national drought policy are:

- (i) Incorporate planning, implementation of plans and proactive mitigation measures, risk management, resource stewardship environmental considerations, and public education as the key elements of effective national drought policy.
- (ii) Improve collaboration among scientists and managers to enhance the effectiveness of observation networks, monitoring, prediction, information delivery, and applied research and to foster public understanding of and preparedness of drought.
- (iii) Develop and incorporate comprehensive insurance and financial strategies into drought preparedness plans.
- (iv) Maintain a safety net of emergency relief that emphasizes sound stewardship of natural resources and self help.
- (v) Coordinate drought programmes and response effectively, efficiently, and in a customer –oriented manner.

3.3.20.1 Policy Statement:

The Drought and Desertification Control Policy aims at checking desertification and mitigating the adverse effects of Drought and Desertification.

3.3.20.2 Objectives:

- (i) Reduce the rate of desertification in the country.
- (ii) Mitigate the adverse effects of Drought and Desertification

3.3.20.3 Strategies:

- (i) Embark on aggressive afforestation scheme in the affected and threatened ecological zones, using drought resistant indigenous and exotic tree species.
- (ii) Encourage the use of alternative sources of energy e.g. coal briquettes, efficient wood stoves, solar energy, wind energy, biogas, etc, and promote efficient wood stoves.
- (iii) Develop an appropriate integrated land use plan in the affected ecological zones, which should emphasize the establishment of Grazing Reserves to reduce wanton destruction of vegetation by humans and animals. Necessary steps would be taken to ensure sustainable management of the Grazing Reserves to reduce outmigration.
- (iv) Strict enforcement of the bush-burning laws and regulations.
- (v) Develop early warning system for drought forecasting and management.
- (vi) Carry out Awareness Campaigns to sensitise all stakeholders on Sustainable Forest Management.
- (vii) Support the development and appropriate management of forest resources in the buffer areas and fringe zones.

3.3.21 EMPLOYMENT, SAFETY AND SECURITY OF PERSONNEL AND HABITAT

The forests and forest industries constitute important fields of employment. This importance is specific and three fold. First, the employment in the forests of resident workmen during forest exploitation is traditional. The large timber firms usually maintain hundreds of skilled and semi-skilled workers. Secondly, the emphasis on artificial regeneration (that is plantation establishment) has provided a dependable avenue for the employment of a large labour force and improved earnings of the workmen. Thirdly, the employment of workmen in forest industries has led to the establishment of forest villages thereby preventing rural-urban drift.

3.3.21.1 Policy Statement:

The forestry sector aims at providing optimum employment opportunities in environmentally safe and secured working conditions.

3.3.21.2 Objectives:

- (i) Provide regular employment for skilled and non-skilled forestry workers in an environment that is healthy, safe and secured.
- (ii) Encourage self-employment through active engagement in sustainable agro-forestry practice and small-scale community forest based industries and thus reduce rural, urban migration.

3.3.21.3 Strategies:

- (i) Promote private sector, NGOs and Community Participation in larger scale plantation establishment.
- (ii) Improve on the present level of employment in forestry at all levels.
- (iii) Promote self-employment in forestry at all levels through the provision of necessary subsidy, inputs and back-up extension services.
- (iv) Increase downstream forestry activities to provide more employment opportunities.
- (v) Promote ergonomic and safety measures in the forestry sector.
- (vi) Promote sustainable protection and security of plant and animal habitats

3.3.22 GENDER ISSUES

The government will ensure that the vulnerable group, women, youth, the aged and poor people are particular beneficiaries in the development of the forest sector. This is in recognition of the fact that the groups are often marginalized in development processes, and these groups are frequently the most dependent on forest resources for their livelihoods. Strategies for implementing the forest policy specifically account for gender differences in the perception and uses of forest products.

3.3.22.1 Policy Statement:

Actively involve women in forest policy enunciation, implementation and sustainable management of forest resources.

3.3.22.2 Objective:

- i. To improve the socio-economic status of women.
- ii. To ensure efficient utilization of wood and non-wood products.
- iii. To facilitate women involvement in the conservation and protection of the environment for sustainable use.

3.3.22.3 Strategies:

- i. Create awareness to enable women appreciate the benefits derivable from involvement in forest resources management.
- ii Involve women in agro-forestry practices.
- Building up capacity of the technical implementers on gender.
- Developing grass root women group promoters' capacity to motivate and empower women on their rights to forest resources management vis a vis other development opportunities.
- Promoting an environment for visibility and credibility of the Group Promoters as development agents by formation of their own NGOs at local level and association at national level for gaining powerful position for advocacy.
- Cultivating a sharing and learning cultures by linking up grassroots level learning and challenges to national and international fora.

3.3.23 YOUTH PROGRAMMES

The problem of youth in Nigeria is acute in the rural areas where they are frustrated by material disadvantages and deprivations as well as limited horizons and opportunities.

3.3.23.1 Policy Statement:

Government will promote measures; and develop programmes that will reduce the alienation of youth and ensure their integration into the mainstream of national life.

3.3.23.2 Objective:

To provide employment and income generation activities through forestbased industries and handicrafts.

3.3.23.3 Strategies:

- i. Promote awareness campaigns and education programmes in schools, colleges, etc, on sustainable management practices to stimulate and sustain the interest of the youths.
- ii. Promote and sustain foresters clubs in schools.
- iii. Enhance the employment of youth in forestry income generating activities.

3.3.24 MANPOWER DEVELOPMENT, TRAINING AND CAPACITY BUILDING

Forestry is recognized as a professional course in a formal education system at the tertiary level. However, it is not treated as a separate subject at the secondary and primary levels, but it is integrated into other subjects like agricultural science. Therefore the learning of the vital functions, services and products of forests and why they should be grown and sustainably managed are only known to a restricted few. This greatly narrows the knowledge base among the people. The facilities for forestry education and training are in state of disrepair' and adequate financial support is required to put these infrastructure in good shape.

3.3.24.1 Policy Statement.

Manpower Development, Training and Capacity Building will aim at providing qualitative manpower, facilities and training with a view to

providing the necessary skills and enhancing efficiency in Sustainable Forest Management at all levels.

3.3.24.2 Objectives:

To strengthen the existing Forestry Institutions to meet the challenges of providing highly trained manpower and capacity building at all levels.

3.3.24. 3 Strategies:

- (i) Provide adequate manpower, facilities and training with a view to promoting efficiency in Sustainable Forest Management at all levels.
- (ii) Carry out skill gap analysis and training needs assessment at all levels.
- (iii) Train-the-trainers to achieve trickle down effect of acquired knowledge, skills and attitudes.
- (iv) Enhance institutional responsibilities for forestry training at all levels.
- (v) Establish linkages with appropriate training institutions.
- (vi) Encourage collaborative and in-plant training programmes.
- (vii) Encourage capacity building amongst all stakeholders at all levels.

3.3.25 EDUCATION AND AWARENESS CREATION

Government's capacity to deliver forestry advisory services has greatly reduced. There is a great concern about the need to carry out an aggressive tree planting and afforestation scheme in all the ecological zones of the country. A revamped and effective extension and advisory support service is crucial to achieve greater impact countrywide in tree growing and more efficient management and use of fuelwood, resources and other non-timber forest products. It must be recognized that farm forestry will succeed if it is relevant to farming systems and rural livelihoods; if there are markets for forest tree products, if land and tree

tenure are secure, and if there are adequate seed supplies and technical advice. There is the necessity to develop guidelines for delivery of extension and advisory services across the country. There must be widespread promotion of opportunities, new technologies and market information relevant to farm forestry.

In the case of processing industries (notably sawmilling), the wastage and efficiency that predominates in the sector is clear evidence of the need for advice improved technologies and clear standards and guidelines.

3.3.25.1 Policy Statement:

To create awareness among the populace on the importance of the forests and the need to conserve forests for the benefit of the present and future generations.

3.3.25.2 Objective:

To evolve a highly sensitized society that is aware of the importance of forests and the need for a participatory approach in Sustainable Forestry Development.

3.3.25.3 Strategies:

- (i) Promote forestry extension and create awareness on the roles of forests in wood production, environmental amelioration, poverty reduction, food security and socio-economic development.
- (ii) Disseminate and promote the adoption of research findings to update the public on current technologies.
- (iii) Actively involve the print and electronic media in education and awareness creation programmes.
- (iv) Institutionalize the National Tree Planting Campaign as an effective means of sensitizing the populace on the importance of tree planting, environmental conservation and Sustainable Forest Management.
- Introduce training in forestry at the Primary and Secondary School levels.

3.3.26 INFORMATION AND DATABASE MANAGEMENT

Inadequate data base remain a major constraint to forest policy formulation, project planning and implementation of forestry development programme. The lack of regular forest inventory is responsible for the dearth of detailed technical data that could be used in drawing up forest management plans for our forest reserves.

3.3.26.1 Policy Statement

Data gathering in all forestry activities (including the use of aerospace technology) will be encouraged in order to develop a sound and current information system and data base for sustainable forest management.

3.3.26.2 Objectives:

- (i) Strengthen forest management information systems.
- (ii) Provide information and baseline data for effective planning and management.
- (iii) Provide information for public awareness, research and extension.

3.3.26.3 Strategies on Effective Networking

- (i) Support regular capacity building and exchange programmes.
- (ii) Provide appropriate information technology equipment to facilitate networking.
- (iii) Support inter and intra networking.

3.3.26.4 Strategies on Processing and Management of Information

Support appropriate and efficient information storage mechanism for easier retrieval, access, processing and dissemination.

3.3.26.5 Strategies on Reliable and Timely Data Acquisition

(i) Support periodic forest data gathering and exchanges at all levels.

- (ii) Create and support effective statistical units at all levels.
- (iii) Support mechanism to engender transparency and accountability in data management.

3.3.27 LAND, TREE TENURE AND CONFLICT RESOLUTION

There is considerable sensitivity amongst many people in Nigeria over land ownership, land and tree tenure, and permitted land uses.

There are few incentives for individuals or private businesses to invest in tree growing on forest management when tenure is so uncertain. This applies equally to tree tenure on private land, and the ownership of plantations or forest resources government land. Natural forests are perceived in many cases to be one-access resources, including those on government land, to be used without regard to planned management or sustainable yields. The 1978 Land Use Act gives the lead on questions of land ownership and tenure. All land is owned, including trees growing on it whether by government or private land. However, there is ambiguity in the special conditions applying to trees of 'reserved species' like Iroko, Obeche etc. These species are not widely planted because of uncertain ownership. This policy aims at guaranteeing tree ownership rights within the enabling laws and traditional practices and customs.

Forest Reserves are reserve lands set aside for specific forest management and is held in trust by government. The new policy is to support the need to widen the concept of Forest Reserves in such a way that any interested parties, including individuals, groups, and communities as well as Federal and local governments can 'set aside' or reserve forests for the purposes of forestry in perpetuity. Where the commitment is made to maintain these as reserves in perpetuity they could be considered as part of the permanent forest estate.

3.3.27.1 Policy Statement:

An effective mechanism for conflict resolution on the means of production, acquisition and marketing of forest products and development will be developed

3.3.27.2 Objectives:

- (i) To reduce conflicts between stakeholders in forestry and other land users.
- (ii) To promote cooperation and partnership building among stakeholders and other land use sectors.

3.3.27.3 Strategies:

- (i) Development and sustenance of appropriate mechanism for effective resolution of conflicts among various land use sectors through an open system of communication.
- (ii) Develop guidelines and principles on education and advocacy for the acquisition and marketing of forest goods and services.
- (iii) Encourage the participation of all stakeholders in decision making on forest products acquisition, processing and marketing.
- (iv) Encourage regular stakeholders' discussions and exchange of ideas.

3.3.28 TRADE (INTERNAL AND EXTERNAL)

Trade in wood products derived from illegal logging, both inside and outside forest reserves is to receive increasing policy attention as illegal logging is seen as one cause of deforestation and a negative influence in both domestic and international markets for products from legally and sustainably managed forest operations.

The most prominent group of policy issues that affects forest products markets is forest law enforcement, governance and trade. Governments, NGOs and trade associations and the industry have recognized that

failures of governance and law are some of the most important causes of unsustainable forest management resulting in deforestation.

Illegal felling and trade of the resulting timber, especially when it compromises sustainable forest management, or reduces potential revenues for legally produced wood products, has become a central issues in recent years. Illegal logging destroys forest ecosystems, robs governments and local communities of needed revenues, undercuts prices for legally harvested forest products on the world market.

3.3.28.1 Policy Statement

Government will seek the best ways to promote legal trade in wood and wood products through effective forest law enforcement, good governance and timber certifications. This will create an enabling trade environment for forest products that will maximize their contribution to the economy.

3.3.28.2 Objectives

- (i) To reduce illegal logging in forest reserves and areas outside the reserves
- (ii) To encourage and embark on timber certification
- (iii) To regulate and harmonize activities in the forest industries.
- (iv) To encourage the use of appropriate machinery in the forest industries.
- (v) To promote production of high quality forest products.
- (vi) To create and or identify markets for forest products.

3.3.28.3 Strategies

(a) Establishment of Timber Council:

Establish a Timber Council to regulate trade and harmonize practices in forest industries.

(b) Product Quality and Certification:

- (i) Enforce the use of appropriate forest harvesting tools and equipment and processing facilities.
- (ii) Ensure that sawmills and factories processing wood and producing furniture components for export are certified by the Timber Council to be adequately equipped and managed by qualified/skilled manpower.

(c) Competitiveness of Value-Added Products:

Promote the production of high quality value added wood and allied products to make them competitive in the international market.

(d) Market Information:

- (i) Develop effective market information network.
- (ii) Provide and support the collection and dissemination of timely and reliable market information.

(e) Carbon Trading

Support and promote carbon trading through the Clean Development Mechanism (CDM) of the Kyoto Protocol.

3.3.29 SECTORAL COOPERATION

In 1999, the Government recognized the need to bring together sectoral institutions responsible for biodiversity conservation particularly Forestry, National Parks, Flood and Soil Erosion Control, under the same Ministry of Environment.

The forest sector cuts across many traditional management boundaries, including energy, agriculture, water, industry, tourism, educations and economic development planning.

The division of responsibilities and artificial sectoral boundaries have created a number potential and actual conflicts.

Various Inter-Ministerial Committees involving relevant stakeholders have been established to address specific issues. This coordinating framework includes representatives of all government ministries involved in the forest sector, as well as representatives from the private sector and civil society. It aims

3.3.29.1 Policy Statement

Government is committed to building synergy among institutions in order to reduce actual or potential conflicts and to prevent institutions from working at cross purposes

3.3.29.2 Objectives

- (i) To increase equity, transparency and fairness in resources allocation and utilisation in the overall national interest.
- (ii) To engender resource accounting and the proper roles and responsibilities of all the sectors of the national economy

3.3.29.3 Strategies:

- (i) Increase the intersectoral discussions and exchange of information.
- (ii) Support and sustain collaboration with other land using stakeholders.
- (iii) Evolve appropriate mechanisms for the valuation of sectoral contributions to the national economy.
- (iv) Establish effective mechanisms for mediation and early response to crisis situations.

3.3.30 NATIONAL AND INTERNATIONAL COOPERATION

Government has signed a number of international agreement and conservators that are relevant to the forestry development. It is obligatory that Government should honour these agreements and instruments through domestic legislation; and action.

Intergovernmental, bilateral and multilateral cooperation will be upheld to promote sustainable development of forest resources.

3.3.30.1 Policy Statement

The government will participate fully in the development and implementation of international obligations and cross border cooperation agreements.

- (i) Respect and honour treaties and conventions to which Nigeria is a signatory.
- (ii) Sustain and comply with bilateral and multilateral agreements.

3.3.30.2 Objectives

To ensure the enforcement of all treaties and agreements to which Nigeria is a signatory.

3.3.30.3 Strategies for the Implementation of this Policy Statement

(iii) Maintain and sustain membership of international organizations such as African Timber Organization (ATO), International Timber Organization (ITTO), FAO, and United Nations Environment Programme (UNEP).

3.3.31 FOREST SECTOR INVESTMENT

Government's economic policy recognizes the role of the private sector in industrial growth and development. The forestry sector will draw on the favourable economic environment to foster greater private sector participation in the sector.

3.3.31.1 Policy Statement

Investment in the forest sector will involve large and small scale investments, as a considerable potential exists for these investments to deliver significant benefits to farmers, small forest owners, and the local communities. Government will therefore further strengthen the financing of small scale forestry and wood processing enterprises in order to address the constraints to private sector investment.

3.3.31.2 Objectives

The objective is to embark on large scale agroforestry and aggressive forest plantation development of economic timber species, including indigenous and other exotic species, such as teak, in order to realize the potentials of forests to contribute to:

- (i) Poverty reduction;
- (ii) Sustainable development;
- (iii) Protection of environmental services of both local and global importance; and
- (iv) Provision of forest goods that will improve the quality of life.

3.3.31.3 Strategies

The primary strategies are identified to overcome the constraints to private sector investment:

- (i) Provide adequate financial mechanisms and technical assistance support for small and medium size forest enterprises;
- (ii) Develop markets for forest environmental services (biodiversity conservation, watershed protection and carbon sequestration);
- (iii) Combat illegal logging and other related corruption
- (iv) Ensure sound Environmental Assessment procedures and safeguard policies to act both as an incentive to investment by responsible companies and as a deterrent to companies that engage in non-sustainable socially and ecologically damaging logging operations.
- (v) Arrive at a consensus on independent forest certification in order to promote the adoption of new forest management standards.

CHAPTER FOUR

SUPPORT FOR IMPLEMENTING THE FOREST POLICY

This chapter sets out the elements of support for the implementation of the forestry policy. These are:

- (i) Development of a National Forest Programme
- (ii) Institutional Reform
- (iii) Forestry Legislation
- (iv) Gender and Equity
- (v) Funding Mechanism
- (vi) International and Regional Cooperation
- (vii) Forest Sector Monitoring and Evaluation.

4.1 National Forest Programme

A National Forest Programme (NFP) will provide a strategic framework for the development of the Forestry Sector. The development of the NFP will take into consideration the thirty priority areas of the policy. It will be regularly updated to keep pace with changes. This will be supported by a process of regular forest sector reviews. The objective of a National Forest Programme is to ensure the conservation, management and sustainable development of forests to meet local, national, regional and global needs and requirements for the benefit of the present and future generation.

A National Forestry Action Plan (NAFP) was first prepared in 1996 through a participatory approach that involved communities, CBOs, NGOs, Private Sector, and Civil Society, Local State and Federal Governments. The implementation of the NAFP was based on the assumption that donors would provide the required financial resources. Unfortunately, the political climate in Nigeria was not favourable till 1999 when a democratic

government was established. The programme was therefore not implemented as conceived.

The NFP was reviewed in 2004 to take into consideration new national and international initiatives in forestry development particularly;

- The 1999 approved Forestry Development Programme;
- The Year 2000 Inter-Ministerial Committee on Deforestation and Afforestation 2000;
- The 2004 National Council on Shelterbelt and Afforestation Erosion and Coastal Zone Management.

The NFP will be the framework for turning the forest policy into action, with short, medium and long term goals and programmes.

Organational and institutional roles and responsibilities will be redefined to conform with the new sector vision and changes reflected in a new legal and operational framework.

Sector Investment

Since forestry is a profitable venture, government should develop a favourable investment climate for private and public investment in the sector under the NFP. The implementation of the forest policy require significant financial and human resources. The Government will continue to develop a long-term investment programme through the NFP processes. This requires a coordinated programme of support based on four types of investment in public sector, private sector, development partners, and International funding.

Public Sector

A public sector investment programme will be developed using economic values for forest resources, including analyses of the different impact of costs and benefits in forestry development. This will include conservation and environmental protection, and wider social and economic development issues. There are several areas where the government can increase its capacity to generate revenues:

- boost the recovery of revenue due to government, which is currently extremely low;
- rationalize the prevailing royalty rates that have historically been well below the true economic and environmental values; and
- review the revenue sharing arrangements with stakeholders to make these realistic, equitable, transparent and sustainable.

Private Sector

A positive investment climate will be created for the private sector. This will include new financial incentives, the removal of market distortions, review of the Investment Code, review of legislation on land leases, the creation of a Forestry Fund, and the development of more transparent and accountable systems of administration and regulation. This new climate, coupled with active investment promotion, will encourage a range of private investments in commercial forestry.

Donor Agencies/Development Partners

Support from development partners will be needed for forest sector development during the transition to sustainable national funding. The government with donors will move towards co-ordinated funding mechanisms to support a sector-wide forestry development programme, as set out in the National Forest Plan. Improved co-ordination of this support will be a responsibility of new forest sector co-ordination structures.

Other International Funding Arrangement

Further sources of funding for sector development will be actively pursued, including carbon credits and other international funds to support biodiversity conservation.

Forest Sector Coordination

The National Forestry Development Committee (NFDC) will be supported and strengthened to provide a forum for forest sector-wide planning and coordination. The NFDC is the highest statutory advisory body on forest issues in Nigeria. It is composed of all State Directors of Forestry, Heads of department of Forestry in the Universities, Director of Forestry Research Institute of Nigeria, some NGOs, representative of private sector in Forestry and other relevant CBOs. The Federal Director of Forestry is the Chairman of the Committee. The Committee is to be supported to meet twice in a year to review the implementation of the NFP. A national consultative forum is also to be developed to allow the public, international partners and all stakeholder to contribute to a regular debate on the forest sector to improve sector coordinators and inform national priorities.

4.2 Institutional Reform

The Institutional framework for the forest sector will be strengthened to implement the forest policy. This will be based on decentralization of function; a reform agenda in which governments at Federal State, level should withdraw from activities that can be carried out more effectively by the private sector or other stakeholders but maintain core functions of policy development and coordination. This includes:-

- (i) A greatly increased role for the private sector and nongovernmental organization in service delivery.
- (ii) New approaches to the development and strengthening of civil society through CBOs.
- (iii) Improved regulation of the sector.
- (iv) Redefined relationship between the organization in the sector and the establishment of memorandum of understanding, and partnership between state and civil organization. This includes the need to encourage State Departments of Forestry to engage in competitive tendering in the allocation of concessions for forest exploitation to increase revenue accruing to State governments and ensure sustainable forest management.

4.2.1 The Role of Federal Government

The Federal Government through the Ministry of Environment responsible for Forestry development will:

- (i) Ensure the integration and coordination of the interests of all relevant Ministry, the private sector, the civil society and all other stakeholders in forestry issues;
- (ii) Coordinate the sector programme support being provided by donor partners and the international organisations.
- (iii) Maintain an oversight of sector planning
- (iv) Develop sector policy
- (v) Regulate the sector
- (vi) Monitor the provision of forestry advisory services
- (vii) Carry out forestry research and development
- (viii) Enforcement of the National Forestry Act.
- (ix) Establishment and management of National Parks and model forest Reserves.
- (x) Support afforestation programme nationwide.
- (xi) National Forest Resources Assessment
- (xii) Public Awareness creation and enlighten
- (xiii) Forestry extension and Advisory Services
- (xiv) Manpower development and Training.
- (xv) Mainstreaming forestry development programmes into the National Economic Empowerment and Development Programme.

4.2.2 The Role of State Government

(i) Consolidation of New and existing forest Reserves

- (ii) Management of forest estate in collaboration with local government, NGOs, Communities, societies and private sector
- (iii) Manpower development and training
- (iv) Forest Resources Inventory
- (v) Establishment of forest plantations and woodlots and demonstration plots
- (vi) Awareness creation and public enlightenment
- (vii) Provision of forestry extension and advisory services
- (viii) Enforcement of state forestry laws and regulations
- (ix) Input service delivery
- (x) Monitoring and Evaluation
- (xi) Forest protection

4.2.3 Local Governments

Efforts will be made to clarify the role of local governments in management of forest resources on government and private land; and to build capacity for the management of local forest reserves. As much as possible local government will be encouraged to devolve responsibility for management down to community level. Roles of local government will include:-

- (i) Development of an effective systems and processes for planning, management and regulation of forestry practices
- (ii) Re-investment of forest revenues in the sector
- (iii) Integration of forest management plans with local government development plans.
- (iv) Development and enforcement of supportive bye-laws.
- (v) Community mobilization and awareness campaigns
- (vi) Forest protection.

- (vii) Establishment of forest reserves.
- (viii) Establishment of plantations, woodlots, roadside and amenity planting.
- (ix) Manpower development and training.
- (x) Monitoring and Evaluation.

4.2.4 The Private Sector

The government will support greater private sector participation in forestry development particularly in forest plantation development with:

- (i) better technical advice and support
- (ii) improved economic incentives
- (iii) more transparent administrative processes; and
- (iv) greater security of tenure over resources created under private initiations.

Along with this support, there will be improved regulation of private sector operations where there are public interests at stake, including the application of sustainable environmental and social best practices in forest management.

4.2.5 Non-Governmental Organisations and Community Based Organisations

The NGOs and CBOs will have a major role to play in service delivery and advocacy for sustainable forest sector development. In recognition of their technical expertise, their sensitivity to gender and poverty and their contacts with the grassroots, the roles of NGOs and CBOs will include:-

- (i) Mobilization and sensitization of the local people
- (ii) Strengthening, and building the capacity of civil society

- (iii) Supporting the active local participation of communities in the management of forests and trees
- (iv) Supporting the provision of advisory services and
- (v) Ensuring that the concerns of the under privileged are incorporated into National Development Processes.

4.2.6 The Role of Community

The community should be involved in the active management of forest Resources in their domain in order to ensure sustainable forest management. The role of communities will include:-

- (i) Formation of community development or cooperative groups
- (ii) Awareness creation
- (iii) Active participation in management and protection of forest estate and trees outside forest reserves.

4.3 Evolution of National Forest Legislation

There is the need to put in place a national forest legislation to give a legal backing to the forest policy in order to ensure its implementation. To date there is no National Forestry Act in Nigeria. The evolution of a National Forest Act started in 1995 and was concluded together with the review of the National Forest Policy. The draft bill for a National Forestry Act is being fine tuned in the office of the Attorney-General of the Federation.

The key feature of the new legal frame work include:-

- (i) The control of Forest Management through the Development of Management Plan and Inventory of the forest estate, and the regulations of the Annual Allowable Cut from the Nations Forest Estate.
- (ii) Enforcement of forest protection measures including the control of forest fires.
- (iii) Regulation of the access to materials and recognition of community rights' in forest estate.

- (iv) The establishment of national forest estates in the various ecological zones for the purposes of seed orchards, research and development, preservation of areas of unique ecological importance, and as pilot forest and wildlife management areas.
- (v) Miscellaneous section n deals with most of the priority areas of the national forest policy including the need to provide dereservation alternative for forestry if dereservation of constituted forest reserve or National Forest Estates has to take place in public interest.
- (vi) The offences and penalties prescribe the appropriate punishment for any trespasser or violation of the Forestry Act.

4.4 Gender and Equity

Women, youth and the poor people will be particular beneficiaries in the development of the forest sector. This is un-recognition of the fact that this segment of the society are often marginalized in development process, and that these groups are usually the most dependent on forest resources for their livelihoods. Strategies for implementing the forest policy will specifically account for gender differences in the perceptions and uses of forest products. These strategies are discussed in the section under policy statement (Section 3.3.22.3) Special considerations will be given to direct support in the form of shares from forest management. These might be provided as health, educational or other facilities funded from forest revenues.

4.5 Funding Mechanism for Forestry Development

In order to successfully implement the new forest policy, adequate and timely financing will be required. Government cannot shoulder this responsibility alone. The funding of forestry development programmes should be participatory, involving all the stakeholders, the Federal, State, Local Governments, the private sector, the communities and international donor agencies. A tripartite arrangement should be mutually considered and agreed upon by the three tiers of government. An acceptable funding

arrangement will also be devised to harness contribution from the private sector, communities, NGOs and external support agencies.

4.51 Government Funding

The bulk of the funding for forestry sector will be from budgetary provision to sectoral programmes. However, it is desirable that the bulk of the government funding should be from the Ecological Funds.

4.5.2 Community Funding

The Community-Driven Approach enunciated in this policy implies that community would show considerable initiative in promoting self-help projects according to their needs. In this regard, communities should accept some level of responsibility by contributing an agreed percentage in cash or kind as necessary for sustainable forest management.

4.5.3 Funding by Other Stakeholders

The private sector, NGOs and CBOs have important role to play in funding forestry development programmes. They should be encouraged to establish linkages and collaboration with our agencies in order to build up their capabilities and expand their scope of action.

The provision of micro credits should be an acceptable policy of our financial institutions in other that these categories of stakeholders can contribute meaningfully to forestry development.

4.5.4 Funding by International Organisations

In the development of the National Forestry Programme, the role of international organizations and donor agencies in the funding of Forestry Development Programmes was recognized. Funding of forestry programmes by these organizations will complement government efforts.

4.6 International and Regional Cooperation

Nigeria is a signatory to a member of International Treaties and Conventions that influence the forest sector. The government will meet its obligation to these conventions and instruments through domestic legislation and action. Some of the key agreements and protocols that affect the forest sector include obligations and opportunities to:-

- (i) Control wildlife trade (Convention on International Trade on Endangered Species of Flora and Fauna).
- (ii) Store carbon through forestry and control global warning (United Nations Framework Convention on Climate Change).
- (iii) Conserve and manage wetlands (Ramsar Convention on Wetlands)
- (iv) Conserve and manage unique sites (World Heritage Convention)
- (v) Conserve and manage biodiversity (Convention on Biological Diversity)
- (vi) Manage forests sustainably (International Tropical Timber Agreement).
- (vii) Combat desertification (Convention and Combat Desertification)
- (viii) Seek fair trade arrangements for forest products (through World Trade Organization).

Other agreements are in the process of being developed. Nigeria will continue to participate fully in these International Forest Policy dialogues where they can help to meet national objectives.

4.7 Monitoring and Evaluation

Government will evaluate the impact of the new policy and strategies developed under the National Forest Programme. Impacts will be measured in terms of the following policy performance indicators:-

(i) Sustainable use of the resource base

- (ii) The maintenance of vital ecological services and conservation of biodiversity
- (iii) The growth of the economy in forest related business and
- (iv) The poverty reduction amongst the rural and urban populations who depend on forests for their livelihoods.

Well-defined Forest Information System (FIS) will be established with reliable data on agreed indicators. All forest sector investment programmes will set out plans for monitoring and evaluation, and develop specific indicators to show progress and impact. The results of the forest sector monitoring and evaluation will be published regularly.

In view of the fact that the problems, challenges and opportunities relevant to the pursuance of forestry development objectives indicated in the policy changes over time, it will be necessary to review this policy (not later) every ten years, so that necessary adjustments in objectives, strategies and priorities can be introduced to ensure that the policy remains a useful guide to action.

The responsibility for conducting such periodic reviews of this policy and for proposing appropriate changes to Government rests with the Federal Department of Forestry.