

FAO TECHNICAL COOPERATION PROGRAMME
Project TCP/RAF/2918
*“Assistance for the formulation of a common agricultural policy for
ECOWAS member states”*

FOREST POLICY PROPOSAL FOR ECOWAS

**Within the framework of
ECOWAP
(ECOWAS AGRICULTURAL POLICY)**

MAY, 2006

FOREST POLICY FOR ECOWAS

TABLE OF CONTENTS

			PAGE
		PREAMBLE	
PART I	1	BRIEF CHARACTERIZATION OF WEST AFRICA	
	1.1	Biophysical background	
	1.2	An important feature of the West Africa forest situation	
	1.3	The West Africa Eco-zones	
	1.4	State of forest cover	
	1.5	Deforestation	
	1.6	Ecological, economic & social values of forests and woodlands in West Africa	
PART II	2.	THE ISSUES FACING FOREST SECTOR IN ECOWAS	
	2.1	The state as sole guardian of all forests/forest governance	
	2.2	Weak forest institutions	
	2.3	Dependence on forest resources	
	2.4	Forest resource depletion	
	2.5	Poverty/environment degradation/Population nexus	
	2.6	Wood energy	
	2.7	Desertification and land degradation	
	2.8	Water scarcity	
	2.9	Emergence of multiple stakeholder interest groups	
	2.10	Management of forests and wildlife recognized as national assets	
	2.11	Conservation of biodiversity	
	2.12	Promoting decentralization, democratization and equity	
	2.13	Diversity in ecological and economic conditions	
	2.14	Transboundary problems	
	2.15	HIV/AIDS pandemic	
	2.16	Globalisation	
PART III	3.0	GUIDING PRINCIPLES FOR FOREST POLICY DEVELOPMENT	
	3.1	International Conventions and Agreements	
	3.2	The Millennium Development Goals (MDGs)	
	3.3	Development of land tenure system	
	3.4	Forest policies in National Development Plans	
PART IV	4.0	FOREST POLICY STATEMENT	
	4.1	Overall goal	
	4.2	Forest policy objectives	
	4.3	Specific forest policy objectives for eco-zones in ECOWAS	
PART V		FOREST POLICY IMPLEMENTATION STRATEGIES	
	5.1	Harmonization of forest and fiscal policies	

	5.2	Forest Resources assessment
	5.3	Sustainable management of forests and its biodiversity
	5.4	Combating desertification and soil degradation
	5.5	Policy for integration of forestry and land use planning with watershed management
	5.6	Forest industry and trade
	5.7	Forest research, training and extension
	5.8	Mechanisms for financing forestry
	5.9	Regional cooperation and partnerships
PART VI	6.0	MECHANISMS FOR FOREST POLICY IMPLEMENTATION

USEFUL REFERENCES

Table and Maps

Map	1:	West Africa
Table	1:	ECOWAS share of World Imports and Exports of Wood Products
APPENDIX	1:	West African Forests in 2000 Key Statistics
	2:	Extend of Protected Areas in West Africa
	3:	Trends in Industrial Round wood in West Africa
	4:	Trends in Woodfuel Consumption in West Africa
	5:	Size and Density of Population in West Africa
	6:	Per capita GNI of West African countries
	7:	Size of the economy: GDP at 1995 prices in West Africa
	8:	Intra-ECOWAS Trade
		i) Example of Major Markets of Ghana's Wood 2003 – 2004
		ii) Exports of Wood Products to ECOWAS countries January – December 2003 and 2004

LIST OF ACRONYMS, ABBREVIATIONS

ATO	:	Africa Timber Organization
C & I	:	Criteria and Indicators for SFM
ECOWAS	:	Economic Community of West African states
IPF	:	Intergovernmental Panel on Forests
IFF	:	Intergovernmental Forum on Forests
MDGS	:	Millennium Development Goals
NTFPs	:	Non-timber Forest Products
PAs	:	Protected Areas
SFM	:	Sustainable Forest Management
TBCA	:	Transborder Conservation Areas
UNFF	:	United Nations Forum on Forests
UNFCCC	:	United National Framework Convention on Climate Change
UNCSD	:	United Nations Conference on Environment and Development

PREAMBLE

This forest policy proposal (final version) was prepared under the cooperation developed between FAO and ECOWAS through FAO's Technical Cooperation Project TCP/RAF/2918 "Assistance for the formulation of a common agricultural policy for ECOWAS member states". A first draft version was submitted to the ECOWAS Executive Secretariat in November 2005. It was later thoroughly reviewed at a workshop held in Lomé, Togo, from December 6 to 8, 2005, purposely organized to validate Forestry & Fisheries sub-sectoral policies within the framework of the implementation of ECOWAP (ECOWAS agricultural policy). The present document incorporates all the major observations and recommendations provided by the Lomé workshop.

The Forest Policy being presented in this document provides the framework reflecting the overall vision and specific objectives of governments and other key stakeholders in the ECOWAS Region.

It should be set within a frame of overarching national policies, including macro-economic, trade, industrial development, and human resources development policies.

Essentially, National/Regional policies, legal instruments and supporting mechanisms must respond to domestic requirements and must equally be consistent with the international policy and regulating framework.

Contemporary forestry is about relationships between people and resources provided by the forest. The manner in which people and resources have been managed and manipulated during the 20th century (post independence 1960 – 2000) has led to serious erosion of human values, vicious cycle of forest cover decline, land degradation desertification and increasing poverty.

Some elements towards achieving a "common vision" for ECOWAS regional forest policy should include:

- An integrated approach by all stakeholders to protect forests, woodlands and savannahs
- To enhance forestry's contribution to socio-economic development and alleviate poverty in line with the Millennium Development Goals.
- Developing the strong synergy of forestry fisheries and agriculture and water resources through protection of biological diversity and watersheds, arresting land degradation and desertification.

The forest policy should provide the basic agreement on the main forest issues which also provides the starting point for finding a common vision for forestry within ECOWAS.

Current management and exploitation plans are to take into account the customary rights of forest dependent populations, while keeping in mind that ecological desiderata for sustainability should be sustained.

National action is the backbone of efforts to improve forest management, but watersheds do not follow national boundaries, neither do areas of unique conservation value; during 1983 drought, forest fires ranged from Burkina Faso in the Sahel to the Southern deciduous forest in Ghana.

Regional approaches add value to national initiatives and global commitment. Countries of the Region need to better cooperate and come up with a common understanding and a common position in forest-related conferences, and to develop unified negotiating positions in the global forest dialogue to address critical issues.

PART I

1. INTRODUCTION

1.1 BIOPHYSICAL BACKGROUND

Forest cover of West Africa constitutes about 17% of total land area of Africa and formed of 15 countries of ECOWAS with approximately 234 million people.

Western Africa is characterized a marked gradation of climate which is reflected in zones of vegetation cover. Dense rain forests and semi-deciduous forests dominate in the coastal belt. Moving northwards, there is a forest-savannah transition, which eventually gives way to sub-sahelian savannah in Northern Mali, Burkina and Niger. There is a strong demographic link between the dry North and the humid South by way of migration.

1.2 An important feature of the West African Forest Situation

Is the extreme variability of climatic conditions from humid forest zone to arid Sahel/desert zone and the consequent differences in biomass productivity:

Sahelian zone, wood biomass	-	4 tons/ha
Humid forest zone	-	200 tons/ha

The latter is characterized by a rich and complex flora and fauna composition.

1.3 The West Africa Eco-zones

West Africa is divided into 4 horizontal bands from North to South: the desert, the Sahel (250 – 600 mm rainfall), the Sudan Savannah (600 – 1000mm), and the Guinean Savannah (with over 1000mm of rain a year).

Semi Arid and Dry-Land Zones

The Sahel and Sudan Savannahs are characterized by severe and unpredicted spells of drought and threatened by the effects of desertification in the Sahel (Map 1).

The Dry-Land forests are being degraded at an average of 0.7% a year, against 2.0% in the humid zone.

The Sudan-Guinea Savannah Belt running from Senegal to Niger but reaching also Chad and Sudan, is made up of generally open formations of clear forest and tree savannah, agroforestry formations– with sheanut parks and *Acacia albida* – suitable for agriculture; staple crops being millet-and sorghum-based food crops, cotton.

The humid forests

Still with a good representation, they provide suitable environment for plantation agriculture: coffee, cocoa, oil palm, coconut, pineapples, tuber food crops (yam, cassava).

Guinea Bissau with about 60% of its land area under forests is the most forested country in the Sub-Region while Niger with about 1% of its land area under forests, is the least forested country (Table 1 in Annex).

1.4 State of Forest Cover

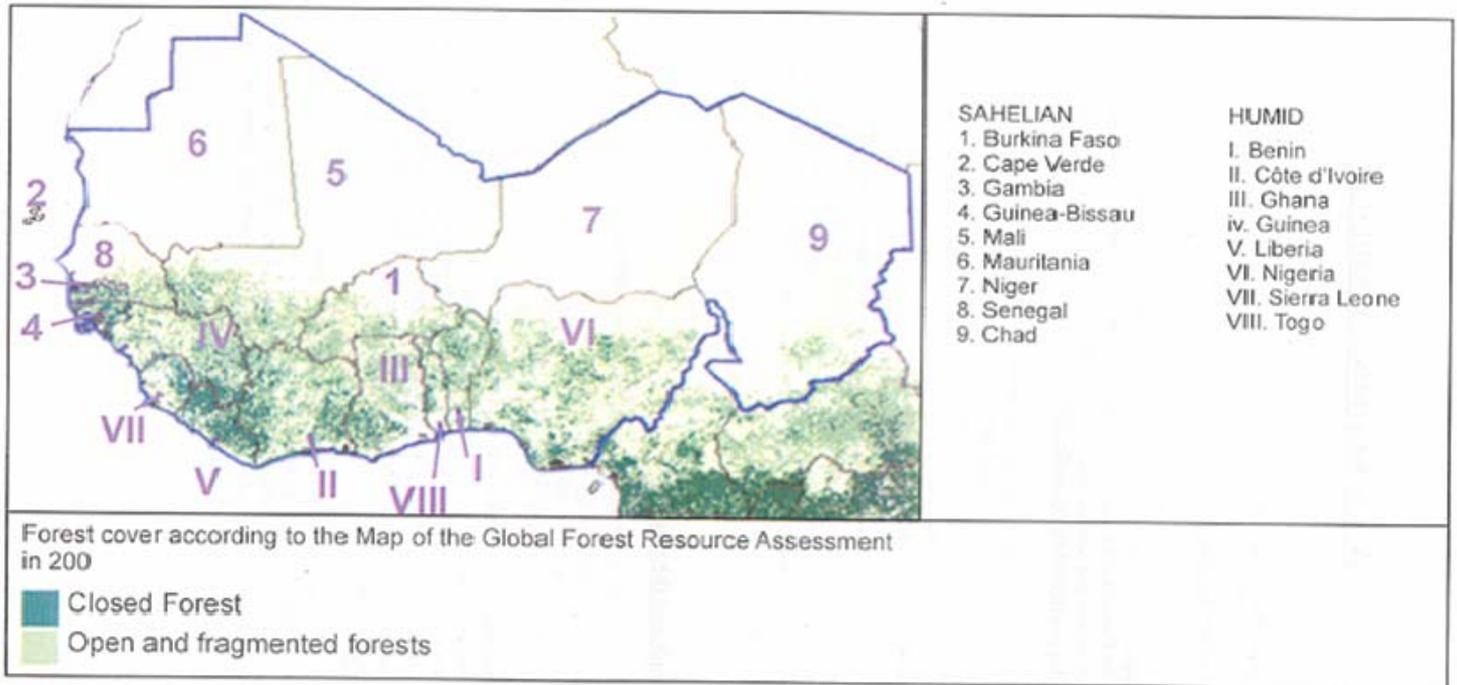
Forests and woodlands cover only about 72 million ha or 14% of the land area. Nigeria, accounting for about 54% of the sub-region's population and 42% of the GDP of West Africa, creates a high demand for forest products.

The Upper Guinea Forest, a strip of tropical moist forest that runs parallel to the coast from Guinea to Cameroon, is one of the world's 25 biodiversity hotspots and ranks first in terms of mammalian species diversity (Conservation International 2001). It is estimated that only 20% of the original extent still remains and this is highly fragmented.

By the end of the second millennium, Liberia contained 42% of the Upper Guinea forest of West Africa. The largest remnant possessed by a single country in the Region as Guinea has 8%, Cote d'Ivoire 28%, Ghana 16%, Sierra Leone 5% and Togo 1%. Several initiatives are underway in these countries to manage the forests and protect endangered species.

In the Semi-Arid and Sub-humid Zones of West Africa, farmers have maintained some forms of "Agroforestry Park lands", where multipurpose trees are deliberately retained on cultivated and fallow land: *Faidherbia albida* (*Acacia albida*), *Acacia senegal*, *Daniella oliveri*, *Vitellaria paradoxa*, *Pterocarpus erinaceus*, *Parkia clappertoniana* and *Azelia africana*.

Map No. 3: West Africa



1.5 Deforestation

West Africa is losing about 1.2 million ha annually; Nigeria, Cote d'Ivoire, Ghana accounted for about 62% of the forest cover loss in the sub-region resulting in degradation and fragmentation of forest cover (FAO 2003).

The situation is aggravated by Civil Strife – with war normally fuelled by all parties by selling forest products for arms.

Deforestation for commercial timber and clearance for agriculture and urban developments are the most intense pressures, as well as over-harvesting of wood for fuel, medicinal products, construction materials, increasing population demand for more forest products.

The remaining forests are also being degraded as a result of recurrent annual fires, surface mining.

The impacts of this degradation include:

- Loss of biodiversity
- Increased rates of soil erosion especially on steep slopes and in fragile ecosystems such as mangroves and transitional marginal forests or derived savannahs
- Reduction on water quality and quantity
- Loss of livelihoods for local communities

It is the local communities that often suffer most from forest degradation as they lose vital sources of firewood, construction materials, clothing and food.

1.6 Ecological, Economic & Social Values of Forests and Woodlands in West Africa

1.6.1 In the 1980's West Africa was the most important source of industrial round wood, contributing substantially to the GDP – but its capacity is declining. Uncontrolled exploitation of timber in the Region would not ensure sustainability of increasing consumption of processed wood for both local use and for export.

Some features to be considered:

- Industrial wood production: 18 million m³ in 2000
- Proliferation of wood based industries (mostly sawmilling and panel – products manufacturing), but also veneer and plywood
- Problems of under-utilized capacity and outdated machinery
Forestry has not taken advantage of rapid advances in technology, hence the low productivity, lack of diversification of products make for loss of competitiveness in the global trade in forest products
- Declining log supplies and emerging policies are discouraging export of logs in favour of local processing and value-addition. ECOWAS share in global trade in forest products is declining, especially in low-value round logs and sawnwood
- ECOWAS accounts for only a minor share of the world imports and exports of wood products (Table 1)

1.6.2 Dependence on Forest Land Resources

Most rural people are highly dependant in forests and savannah woodland resources for their:

- energy needs: 85 to 90% are met from wood and charcoal totalling 175.086 million m³ in 2000.
- wildlife (bushmeat)
- medicinal plants
- wood, cane and rattan for construction, furniture and crafts
- animal fodder, germs, dyes and aromatics

- palms for local wine

The major role of NTFPs is contributing to subsistence consumption and as a source of income generation for the most vulnerable groups in the society: fodder, traditional medicine, bushmeat, gums, honey. Dependence on NTFPs increases during droughts and natural disasters.

1.6.3 Tropical forests are also vast sinks for CO₂, and this plays a critical role in mitigating global climate change, the impacts of which are predicted to be most severe for most African countries and other developing countries.

1.6.4. Linkage between Forestry & Fisheries Resources

The coast line of ECOWAS include several wetlands and mangroves which are of great economic and biodiversity importance; they provide habitat for fish, invertebrates, and serve as grounds for many fishes, crabs shrimps, molluscs.

Many of ECOWAS states have acceded to the Ramsar Convention on Wetlands.

Fuelwood plantations are especially established for fishing communities for fish smoking; some tree species are known to give special flavour to smoked fish-making it a delicacy.

Table 1: ECOWAS share of World Imports and Exports of Wood Products

Forest resources				Production of wood-based products, 199			
Land area ('000 ha)		607 842		Quantity		%of world total	
Total forest area, 2000 ('000 ha)		69 822		Woodfuel ('000 m ³)	168 009	10	
Percentage of land under forest		11.5		Industrial roundwood ('000m ³)	17 872	1	
Forest area per capita (ha)		0.3		Sawnwood ('000 m ³)	4 157	1	
Annual change in forest area, 1990- 2000				Wood panels ('000 m ³)	578	n.s.	
- Thousand hectares		- 1 265		Pulp for paper ('000 tonnes)	23	n.s.	
- Percentage		- 1.8		Paper and paperboard ('000 tonnes)	63	n.s.	
International forest products trade: quantity and value, 1998							
Product	Export quantity	Export value		Import quantity	Import value		
		US\$ thousand	% of world total		US\$ thousands	%of world total	
Woodfuel ('000 m ³)	n.s.	27	n.s.	n.s.	17	n.s.	
Industrial roundwood ('000 m ³)	249	39 479	1	25	3 782	n.s.	
Sawnwood ('000 m ³)	832	30 844	1	43	8 872	n.s.	
Wood panels ('000 m ³)	270	100 966	1	36	14 517	n.s.	
Pulp for paper ('000 tonnes)	n.s.	302	n.s.	8	4 939	n.s.	
Paper and paperboard ('000 tonnes)	4	2 564	n.s.	259	187 824	n.s.	

Note: n.s. = not significant, indicating a very small value. (FAO: State of the worlds Forests 2001)

PART II

2. THE ISSUES FACING FOREST SECTOR IN ECOWAS

2.1 The state as sole guardian of all Forests/Forest Governance

With the global conservation consciousness in the 1940 to 1960's, the state was required to reserve extensive areas of forest land to be managed by professionally educated foresters using scientific practices.

Forestry was then considered as a bio-technical and managerial activity and little attention paid to the social aspects. Forest utilization by local communities was allowed to continue as long as it was not detrimental to the national interest.

Pre – and post independence power structures centralized forest governance at the national level, marginalizing local communities.

In this solo effort, the state of forests worsened instead of improving, hence the interventions from international NGOs, external donors with financial and technical resource to save what remains of African forests.

2.2 Weak Forest Institutions

Forest management in the past focussed on regulating harvesting and managing forests for a lucrative export trade; sadly enough, with uncontrolled exploitation of timber, less and less natural forest areas are being sustainably managed in West Africa.

Poorly developed forest sectors are plagued by weak institutional capacity to enforce forest laws, and overall political instability, civil strife in the region for over four decades have not helped either.

Some features:

- Traditional systems of forest management/logging rules have broken down
- Large-scale illegal operations are extant
- Ill-defined tenure has undermined sustainability
- Investments in forest has been relatively low, and forest are used to generate the "green gold" (the much-needed foreign exchanged to support the development of other sectors).
- Sectoral, non-participatory, non-gender balance and poorly communicated planning mechanisms characterized forestry prior to Rio

1992, Rio de Janeiro United Nations Conference on Environment and Development (UNCED).

Many forest sector institutions in a country may be located in different ministries; frequent changes in ministerial portfolios do not provide coherence and stability in administration of the forest sector.

2.3 Dependence on Forest Resource

Agriculture and allied activities continue to be the foremost source of livelihood for the majority of the rural people.

There is the increasing dependence of the poor on forests as a safety-net to provide a wide range of subsistence goods and services, and also as a source of income.

Forest resources often form an integral part of the community's living environment; and consequently the decision making on forest management must be an integral part of the local community's livelihood strategies.

NTFPs remain in the realm of the informal sector and are being over-exploited; tendency for bio-piracy in this area.

2.4 Forest Resource Depletion

For several decades, the West African region has suffered large-scale deforestation due to:

- Population pressure
- Periodic droughts and wildfires, surface mining

Deforestation has substantially destroyed the biophysical cover leading to accelerated erosion – soil wind erosion in the more drier areas and water erosion in the more humid areas – leading to very low agricultural productivity; loss of biological diversity.

Unique ecosystems like mangroves are undergoing attrition; this formation plays an essential environmental role in protecting coasts and estuaries and fisheries.

There is the tendency for mass population shifts from:

- (i) rural to urban areas population
- (ii) dry-zones continue to move to humid zones down south

2.5 Poverty/Environment Degradation/Population Nexus

The Poverty Cycle

Accelerated population growth drives some people to cultivate lands marginal for farming in semi arid areas and in tropical forests where soil and climate conditions are poorly suited for annual cropping.

Fuelwood collection, surface mining have tended to deplete soils and forests and contributed to forest land degradation; stagnant incomes and absence of improvements in human livelihood have precipitated vicious cycle of poverty.

2.6 Wood Energy

Wood continues to be the forecast source of energy in most countries of the Region; estimated fuelwood needs (2000) – 172.5 million m³ or 91% of roundwood produced being used as such.

2.7 Desertification and Land Degradation

Desertification is a major environmental problem and it is expected to worsen in the next two decades.

CILSS countries are jointly addressing desertification and drought which is threatening to neutralize all development efforts. CILSS is mobilizing collaborative action, and forestry is expected to play a prominent role in anti-desertification efforts.

2.8 Water Scarcity

Water scarcity is already critical for most urban centres in the sub-Region and is emerging as a critical issue.

With population growth, water scarcity will emerge as a crucial issue, and the fact that most of the river basins in the sub-Region are shared by a number of countries would necessitate improved collaboration for sharing costs and benefits of integrated watershed management and protection.

This means that the role of forests and woodlands in regulating water supplies will become a key issue; forestry impact on water supplies will be under close scrutiny.

2.9 Emergence of Multiple Stakeholder Interest Groups

The forests provide multiple products as well as environmental and cultural services to society, and consequently forest use is characterized by multiple stakeholder group interests including an emerging private sector.

Foresters are confronted with a nominative plurality regarding forestry – various stakeholders have different experiences, positions, knowledge and

skills, and objectives regarding forest management. There is the need to develop innovative forest management regimes required for conflict resolution between various stakeholders.

Foresters in general and forest department in particular will increasingly be called up to play a facilitator role, rather than performing directly on the ground as managers.

2.10 Management of Forests and Wildlife recognized as National Assets

There is a growing respect for the diversity of natural resources and their management for sustainable use; and the appreciation for cultural and spiritual values of forests.

Protected Areas establishment has also brought about conflicts. The main focus is on PAs; but there is the need to pay more attention to forests and wildlife outside Protected Areas.

2.11 Conservation of Biodiversity

A general principle is that ecological structure, function and dynamics of forests and woodlands including water, soils, nutrient cycles, land-forms and micro-climate and wildlife must be protected and maintained, or restored where degraded by human activity.

There are also problems of encroachment, poaching for bushmeat in Protected Areas and across borders.

2.12 Promoting Decentralization/Democratization and Equity

- The need to decentralize forest planning, thereby enabling forest programmes to be based on specific ecological and socio-economic features
- The need to guarantee the representative and equitable participation of all major groups. Strengthen and facilitate multi-stakers, especially civil society NGO and private sector participation at national and Regional levels in agenda setting, policy-formation and planning
- Equitable sharing and distribution of benefits including investments and employment opportunities
- Create a clearing house mechanism (regional environmental databases) for exchange of information; infrastructure, research and experiences.

2.13 Diversity in Ecological and Economic Conditions

Diversity in ecological and economic conditions is a underlying feature of the sub-Region, but this diversity presents its unique opportunities and challenges to economic integration of the sub-Region.

2.14 Transboundary Problems

Many forest issues such as forest fires, forest insects and disease, forest products trade – cross national borders.

Extensive transboundary illegal trade in timber, bush meat exist within the Region.

Transborder conservation can be an effective approach to natural resource and biodiversity conservation, where shared cross-border threats can be tackled jointly and mutual benefits can be gained collaboratively across a border (Box 1 addresses nomadic herdsmen in the Region) ;

Trade in Forest Products

Europe and America have tended to dominate the wood export trade in ECOWAS countries. The growing intra-ECOWAS trade in wood since 2000 must be encouraged to promote the larger concept of ECOWAS economic integration.

The development of competitive national and intra-regional markets involving a large number of producers and consumers is also an issue at stake.

Box 1: FLUSH OUT THESE HERDSMEN (Daily Graphic, Accra, 12/11/05)

The Regional Minister of the Volta Region in an address to the Volta Regional House of Chiefs ordered the immediate expulsion of nomadic Fulani herdsmen from the Region. He described the herdsmen as people who behaved as landlords and not as visitors. Mostly from the Sahel region of West Africa, which includes Niger, Chad, Mali and Burkina Faso, the herdsmen usually travel southward with their livestock in search of greener pastures, during the Harmattan season. The Minister explained that the order was not against law-abiding resident herdsmen but the nomadic ones who have been wreaking havoc on us through their nefarious activities. Like the Massai in East Africa, these herdsmen in West Africa pay less respect to political boundaries

2.15 HIV/Aids Pandemic

The forest sector has some inter-phase with HIV/AIDS pandemic. Deaths in cadres of professional foresters, including all skilled labour force are seriously

exposed to HIV/AIDS. This problem has also contribute to food insecurity in some area.

2.16 Globalization

Unfair global trade practices tend to over burden the economies and natural resources of countries in the Region, aggravating high external debts, and persistent and pervasive conditions of poverty.

2.17 Maintenance of Sustainability

The principle of sustainability explicitly requires an inter-generational responsibility – or the part of the present custodians and users of resources to ensure sufficient opportunities for future generation to receive adequate benefits from these resources.

The principle is difficult to apply in practice, but the principle of sustainability and sustainable development must be harmonized for the particular needs of any country in the Region.

2.18 Monitoring and evaluation of Progress in Sustainable Forest Management

Practical ways to manage toward sustainability are being pursued internationally by developing Criteria and Indicators (C & I) by which forestry may be judged sustainable or not, to allow each country to assess its performance as a whole.

These assessments may be applied for certification at the operation level:

- (a) Targeting the Forest Management Unit (FMU) or
- (b) Targeting Forest products (with green labels) so that firms or forest operations may be accredited/certified, and products may also be certified as coming from sustainable forestry.

The African Timber Organization (ATO) and ITTO have played important roles in this respect through the development of C & I for both Humid West Africa and Dry and Arid West Africa.

Another dimension of the sustainability requirement is to assure financial sustainability in order to guarantee the achievements of the overall goals and objectives of the Region's forest policy

Setting Targets

Sustainable Forest Management plans should include clear targets, timetables and indicators to show decision makers as well as the public whether sufficient progress has been made.

Forest certification is a market instrument which provides incentives for sustainable forest management as it links producers and consumers in their responsible use of forest resources.

2.19 Role of Government

- To ensure the necessary coordination and collaboration between institutions to promote a coordinated natural resources policy, conflict resolution, and spatial planning
- Ensure the protection of biodiversity habitats, sites of historical and cultural value, and scenery
- Ensure responsible attitude in forestry through its enactments and regulations
- To adopt the anthropocentric approach through the provision of goods and services to the people (i.e. food security and general well-being of entire rural communities using forests to alleviate poverty).

2.20 Limitation of Regional Groups

Regional initiatives are a complement, not a substitute, for work at the National level. For example, individual countries have laws and institutions enabling them to levy taxes and enforce regulations, whereas Regional groups do not have these powers.

But issues like **climate change** can be better addressed at the Regional/global level than at national level.

2.21 Research Coordination

Regional Seminars and Conferences sponsored by Thematic Technical Working Groups to develop common standards and methodologies for Best Practice in forestry in the Region, e.g. Forest Fire Management, Insects and Diseases, Forest Assessments, Monitoring and Evaluation, Silviculture interventions in Tropical High Forests

Inadequate science and technology base of sub-Regional forestry, i.e. supporting a strong indigenous science and technology.

2.22 Slow Pace of Technology Changes

- The slow pace of technological changes in wood processing and consequent low productivity and loss of competitiveness in the global market.

3.0 Valuation of Forest Resources

- The strategic importance of documenting and valuing environmental resources and in particular, water-related services of forests

Need to develop methodologies and case studies on assessment and valuation of economic and environmental services of forests in the Region.

PART III

3.0 GUIDING PRINCIPLES FOR FOREST POLICY DEVELOPMENT

3.1 International Conventions and Agreements

The issue of forests has been a priority on the international policies and political agenda since 1990s.

Serious concerns about the state of the global environment have given rise to a variety of international forestry agreements, organization, and initiatives that naturally affect policy for the forest sector in ECOWAS.

The following documents and initiatives are relevant to the Region's forestry were either a direct product or an outcome of UNCED in Rio 1992; they include:

- I) The Forest Principles: a non-legally binding authoritative statement of Principles for a global consensus on management, conservation and sustainable development of all types of forests.
- II) Convention on Biological diversity (CBD): conservation of Biodiversity, sustainable use of its components, fair and equitable sharing of the benefits arising from the utilization of genetic resources
- III) Agenda 21: a document presenting detailed work plans for sustainable development including goals, responsibilities and estimates for funding.
- IV) United Nations Framework Convention on Climate Change (UNFCCC): it influences the forest sector in so far as forests are recognized for their role in mitigating industrial carbon emissions; several mechanisms were conceived for the materialization of this purpose.
- V) United Nations Convention to Combat Desertification (UNCCD): it provides the framework for a coordinated international effort to tackle the pervasive phenomenon of desertification in all its dimensions.
- VI) United Nations Commission on Sustainable Development (CSD), which has the role of the international monitoring of the implementation of all these agreements; it also established an Intergovernmental Panel on Forests (IPF), superseded by an Intergovernmental Forum on Forests (IFF) and later by its successor the UN Forum on Forests (UNFF), that works towards the establishment of consensus and preparation of coordinated proposals for action to support sustainable forest management.
- VII) National Forest Programme (NFP): another outcome of the process is the globally accepted framework for forest policy, planning and

implementation at the country level, and supported by a coalition of international institutions, including the IMF/World Bank.

- VIII) National Forest Programme Facility
- IX) Economic and Monetary Union of West African States (UEMOA)
- X) NEPAD Environment Initiative
- XI) African Convention on the Conservation of Nature and Natural Resources (2003) urges member states inter alia to take all the necessary measures for the protection, conservation and sustainable use and rehabilitation of vegetative cover.
- XII) African Timber Organization (1976) sets itself among other objectives to encourage the preparation of national forest policies aiming at forest ecosystem conservation and effective utilization.
- XIII) International Tropical Timber Organization

Consequently, the Region must take care in applying these norms and standards to the development of policies in the Region, while fully recognizing each country's obligations to the Conventions and Agreements.

3.2 The Millennium Development Goals (MDGs)

The Millennium Development Goals (MDGs) are among the most important "guidelines" for sustainable development and development cooperation; countries, with their institutions and civil society partners, as well as several international organizations, are now trying to link sustainable forest management with **poverty reduction**.

Globalization and International factors provide a framework for challenges to the forestry sector through a much more demanding world market for quality standards and sustainably sourced export wood commodities.

- 3.3 Development of Land Tenure System:** To encourage land owners to adopt sustainable cultivation techniques.

3.4 Forest Policies in National Development Plans

Before Rio, 1992, forestry was accorded a low priority in national development plans in several countries; forests were virtually liquidated to feed the development process.

Today forest policies must be translated into such targets so as to contribute to the achievement of the planned national development process.

PART IV

4.0 FOREST POLICY STATEMENTS

4.1 Overall goal

The overall goal of Forest Policy is the conservation and sustainable development of the plant and animal genetic resources, restoration of degraded forest lands for the lasting benefit of the people of ECOWAS

4.2 Forest Policy Objectives

- to harness the potential of forests to improve food security, to reduce poverty based on multiple use forestry
- to integrate forestry in the sustainable economic development of countries of West Africa particularly through appropriate commercial utilization of their forests.
- to contribute to environmental protection through the preservation of vital local, regional and global environmental services and values
- to emphasis provision of forest-based services (knowledge based provider, Environmental Impact Assessment, monitoring and evaluation, extension services) with a revitalized public sector
- decentralization of forest management, support community-level initiatives, and enhance the role of civil society organizations and private sector
- Strengthening institutional structures for overseeing implementation of policies and legislation
- Forestation to restore degraded forests and woodlands

4.3 Specific Forest Policy Objectives for Eco-zones in ECOWAS

Owing to the diversity in ecological and economic conditions, obvious differences exist in the development of the forest sector in the different countries of the Region; and management practices need to be modified to accommodate these differences.

The differences between the dry and humid zones could also be seen as an opportunity for providing a wider range of products and services, promoting closer integration between the various zones within a country, as well as between countries.

4.3.1 Humid Forest Zone

- To ensure the protection of the environment to maintain productive of agriculture
- To protect the rich biological diversity of these forest functions in PAs and Forest Resources/National Forests
- To manage the forest so that it can contribute to socio-economic development
- To undertake local processing for added value exports
- Reforestation to restore degraded forest lands

4.3.2 Sahelian West Africa

- Drought and desertification control through water and soil conservation
- Development/management of natural forests and woodlands for multiple benefits
- Reforestation to restore degraded forest lands
- Animal grazing and wildfires controlled

The development of agroforestry systems constitute the main element of stability and contribute alleviation of harmful effects of drought and desertification in order to:

- satisfy the wood energy requirements of the population
- encourage community participation of the management of natural forests
- promote community/private village plantation programmes
- promote programmes to protect National Park
- promote programmes to protect large desert fauna ostrich, Oryx

PART V

5. FOREST POLICY IMPLEMENTATION STRATEGIES

The multiple use of forests is an integral part of modern forest management as it provides for a wider range of uses and opportunities

The Overall Goals may be pursued through sustainable management of the most critical areas within the context of overall natural resources planning scheduled for next 10 – 20 years.

Policy implementation strategies are discussed below for critical areas:

5.1 Harmonization of Forest and Fiscal Policies

- Implementation of International Agreements and Conventions:

Consideration of each member country signing and adopting those agreements and conventions and mainstreaming them in their national policies
- Harmonization of Forest Policies: through application of common guidelines, C. & I, EIAs and tax systems compatible with sustainable forest management.

5.2 Forest Resources Assessment

- Inventory of forest/wildlife/NTFP resources
- Regional forest/wildlife resources database is established
- Geo-spatial/GIS monitoring of forest resources

5.3 Sustainable Management of Forests and their Biodiversity

5.3.1 Sustainable Forest Management and Utilization of Natural Forests and Woodlands

Background

The role of natural forests and woodlands include:

- timber for housing, fencing
- NTFPs, medicinal products, honey, grass for thatching, and weaving and cattle grazing, bamboos and rattans etc for local craft industry

Woodland ecosystems provide many environmental benefits such as protection of soils and of water catchments; removal of indigenous trees along streams (riparian buffers) has had widespread negative effects for arable crops, and water quality.

There is general agreement that national forests and woodlands in the Region are not being sustainably managed.

Weak institutional capacity to enforce laws and logging regulations has resulted in uncontrolled over exploitation; the situation is aggravated by uncontrolled recurrent fires, illegal harvesting, encroachment for shifting agriculture.

Today's forests and woodlands are historical constructs that have adapted and survived the variability of past climates. Given the life-cycle of most forest species, forest management systems will need to radically adjust their limits of knowledge and adapt strategies to initiate, enhance and plan forest biodiversity in harmony with the future climate change.

5.3.1.1. Objectives

- The conservation and development of the forests and woodlands of the Region, serving national economies, societies and communities of the region
- To improve management of forests and trees as an integral part of land-use

5.3.1.2 Strategies for Implementation

- Develop a regional Information System on forest and wildlife resources as basis for policy planning
- Adopt joint/collaborative management approaches
- Improve e.g. cooperation in control of forest fires awareness about harmful and unsustainable practices
- Establish periodic inventory, growing stock and yield regulations at the FMU level
- Develop a Code of "good forest practice"
- Adopt holistic approaches to value forests as much of the value of the tropical high forest is still unmonitised.

5.3.2 Wildlife and Vegetation Protection and Management

5.3.2.1 Background

Native forest reserves should be managed for conservation and restoration of biodiversity centred on identified hotspots of global and regional significance.

Steep ecological gradients in West Africa Region makes for a high degree of biodiversity both within and between countries. The system of PAs is aimed at conserving representative areas of the major ecosystems. The system of Parks, forest reserves and biosphere reserves in the Region covers about 3.5% of the land area (FOSA 2003).

Protected Areas (PAs) have been fragmented by encroachment illegal harvesting of timber, and hunting for bush meat.

Other threats to biodiversity include fire regimes, frequent droughts, unsustainable exploitation of NTFPs.

5.3.2.2 Objective

To establish the framework for conservation and sustainable management of wildlife resources with the participation of rural communities.

5.3.2.3 Strategies for Implementation

- I) Expand and improve the three main management categories for wildlife conservation:
 - PAs/Nature Reserves, wetlands to be co-managed by local communities.
 - National Forests/Forest Reserves
 - National Parks

II) Transboundary Movement of Wildlife

Transboundary poaching is severe, hence the need to establish transboundary "Peace Parks" to facilitate collaborative efforts between adjacent countries (Box 2).

There is on-going inter-country collaboration especially in the establishment of Transboundary Conservation Areas (TBCAs) to streamline management of wildlife movement, safeguard watersheds and combat poaching and illegal trade in forest products.

Box 2: A shared Transboundary Vision – "W-Park"

Globally significant biodiversity and natural resources of "W-Park" are managed cooperatively by Benin, Burkina Faso and Niger thereby contributing to sustainable development, and enabling the people of the Region to share in the ecological, social and economic benefits.

- III) The potential for eco-tourism is hindered by:
- poorly developed infrastructure
 - high security alert (spate of civil unrest and political instability)
- IV) Other strategies include:
- Human Resource Development: In-service Training, Workshops, Post Graduate Training
 - Community participation in Wildlife Management and collaborative Wildlife Resource Management
 - Economic Development of Wildlife Resources:
 - Establish framework for Wildlife Enterprises; Zoos
 - Explore potential for domestication of cane rats, grass-cutters
 - PA Management Plans: Update annual working plans, patrols against illegal activities
 - Public Education: Disseminate general information on country's wildlife and Protected Areas, educate public on ecological and socio-economic importance of wildlife conservation and Protected Areas
 - Wetland Management: Public participation in conservation and management of wetlands especially Ramsar Sites
 - Wildlife Management Information Network for the Region
- V) In order to fully accommodate the range of biodiversity targets and ecological processes supported by the tropical forest ecosystems, as well as to safeguard against the potential vagaries of global-scale change, conservation priorities must be scaled up across large landscapes (through bio-regional planning, biodiversity corridors).

5.3.3 Community Forestry

5.3.3.1 Background

Sad history of traditional forest policies was to look at forest management as "government matter", underscoring the potential of local communities.

Both colonial forest rules and post independence codes did not recognize grassroots community involvement or responsibility in forest management.

It is now imperative to rewrite the various forest legislative instruments (laws and regulations) governing natural resources management and encourage national forest resource management with local community's participation.

Forestry offers a wide scope of options in integrated rural development. It provides income generation opportunities through e.g. plantation forest jobs, tree out-grower schemes, harvesting and processing from woodlots, charcoal production, wood-based industries, trade in NTFPs, (cultural values, food and medicine).

A cue can be taken from the 1998, Acts of Senegal which made innovative strides in forest resource management by native people (Box 3).

5.3.3.2 Objective

Community forestry is forestry designed and applied to meet local, social, household and environmental needs and to favour local economic development. It is aimed at decentralizing and devolving authority for the management of natural resources to lower levels of government and to civil society.

5.3.3.3 Strategies for Implementation

- I) It is implemented by communities; it included farm forestry for production of small timber and fuelwood, agroforestry, community or village planting, woodlots and wood, wood management by rural peoples as well as tree planting in urban, peri-urban, urban areas.
- II) It is community-driven conservation and management of resources on land owned by the community.
- III) People are encouraged to plant trees especially indigenous trees:
 - in gardens and fields (as wind breaks, shelterbelts)
 - to conserve stream side ecosystem (riparian buffer zones)
 - to build resource dbase and improve the living environment and in support to small forest-based enterprises e.g. cane, rattan, bamboos

Box 3: Management of Forest Resources by Native People: the Senegalese Experience

The New Development in Senegalese Experience

- Presented that a proportion of the national forestry funds obtained from royalties and felling auctions be paid to the local community
- Made it possible for the forestry administration to hand over the management of a part of the state-owned forests to local communities, based on an approved management plan
- It provided for the transfer of responsibility for natural resources and environmental management to the local communities; e.g. allowing communities to enter into contract and recruit forest guards to keep watchful eyes on their forests
- Local communities are responsible for the day to day management – establishment of fences and agroforestry plots, natural forest management, the planting of community forests and ecosystem rehabilitation in general
- Article 3 reaffirms that the State has overall responsibility for the rational management of natural resources and the environment. It must also ensure the longevity of the Reserves, thereby promoting sustainable development

(Ababacar Boye in World Forestry Congress, People and Forests in Harmony, 2003)

- IV) Community forestry to form part of the national forestry strategy, urban development, bio-energy provision; it is an integral part of management of grazing lands and arable lands (agro-silvo-pastoral)
- V) Pay special attention to women rural communities, who often bear the burden of maintaining the well-being of the family
- VI) Need for clarity of ownership and user rights
- VII) Role of traditional rulers to be defined: Preponderance of community or communal controls our woodlands in dry-zones, woodland in the

Sahel/Sudan zones remain open-access resource with customary systems inadequate to deal with emerging problems

VIII) Felt community Needs must be analysed and addressed, including also Government Support:

- Provision of technical and financial support
- Provision of necessary leadership in community forestry
- Establishment of agreements in Replanting and ensure availability of seeds and trees for planting
- Establishment of harvest controls, illegal harvesting
- Provision of relevant information, and technologies, through extension services
- Stimulate development through pilot programmes and projects
- Assist in capacity building, developing skills and competencies of community foresters so they can be efficient providers of service through improved agricultural/forestry extension services
- Support innovation through Research
- Developing an institutional framework and adapting laws to ensure wider participation

5.3.4 Urban Forestry

5.3.4.1 Background

Urban forests include a variety of landscapes such as greenbelts, Urban Parks, street right-of-way, residential areas, industrial and commercial parks, parking lots, management of these environments is coordinated with the "built" environments within towns and cities.

Benefits of Urban Forestry include:

- the enhancement of the city's appearance
- moderation of temperature, noise, air and water pollution extremes
- control of runoff
- enhancement of urban recreation

Importance of retaining peri-urban and urban green belts is recognized as part of inter-disciplinary urban planning.

5.3.4.2 Objective

To seek opportunities to consider how the built development might be enhanced by incorporation of wooded and other green elements through the town and country planning schemes.

5.3.4.3 Strategies for Implementation

- I) Coordinated planning to involve government departments, metropolitan and sub-metro and District/Communal Assemblies and law enforcement organizations
- II) Ordinances (zoning ordinances) may provide for preservation and conservation of trees and forests in areas of urban development
- III) Create green belts along highway corridors for environment improvement.
- IV) Built management capacity to maintain and monitor urban forest and green belts.
- V) Promote environmental awareness and tree planting campaigns by the population.

5.3.5 Industrial Forest Plantations

5.3.5.1 Background

Tree Plantation cover about 1.76 million ha; the planting rate of about 58,000 ha/year is confined to Nigeria, Senegal, Cote D'Ivoire, Burkina Faso, Cape Verde.

5.3.5.2 Objectives

Plantations are meant to reduce development pressures on other natural forest areas and create new opportunities to provide greater protection to areas of globally or regionally biodiversity significant areas.

Plantation development is an important intervention to meet well-defined objectives:

- Production of industrial wood
- Production of woodfuel to meet growing urban energy needs

- To enhance environmental services e.g. establishment of wind breaks and shelterbelts to reduce adverse effects of dry winds on agricultural production units
- Forest plantations are economic assets, providing employment and foreign exchange
- Manage plantations to alleviate pressure on natural forests and woodlands

5.3.5.3 Strategies for Implementation

- I) Silvicultural interventions would be needed:
- Plant genetically improved planting stock through biotechnology
 - Use fertilizer and other chemical treatments

- II) Counter and limit adverse effects of industrial plantations on water resource and biodiversity.

Judicious layout of plantations should either maintain indigenous riparian buffer zones to help restore the multiple functions they perform in river basins.

- III) Plantations should be in the right places in a socially and environmentally acceptable manner.

- IV) Assessment of profitability of plantation development and associated risk issues are critical to large-scale plantation development by private sector.

Any industrial plantation forest operations have large or small, will need to be competitive with counterparts in the Region.

- V) Implementation of legally recognized Criteria and Indicator of sustainability and certification of forest products from sustainably managed forests (natural and planted forests).

- VI) Plantations In Humid Zone:

The emphasis is on high-value industrial plantations managed by public sector, e.g. Teak, *Cedrela*, *Terminalia*, *Triplochiton* plantations are established as compensations measure for lorry metal forest.

Rubber Plantations are concentrated in Liberia, Nigeria, Senegal, Cape Verde, but rubber wood here is underutilized.

VII) Plantations in Sahelian Zone:

Plantations are established mainly for:

- I) Woodfuel production
- II) To improve environmental protection including desertification control and sand-dune fixation: Species used include *Eucalyptus*, Neem, *Casuarina equisetifolia*.

Green Belt Plantations established as wind breaks and shelter belts to protect towns from dust storm advance of sand dunes

The incidence of fire, illegal harvesting, encroachment have tended to undermine productivity.

Increasing attempts at privatization of Plantations are underway. The replacement of indigenous vegetation by monocultures is not ecologically acceptable; plantations should not be sited in areas important for diversity especially stream banks.

5.4 Combating Desertification and Soil Degradation

5.4.1 Background

Desertification is one of the critical problems facing most countries in West Africa.

Periodic droughts/Locusts undermine productivity of crops and livestock. Hence the population is often forced to internal and cross border migration as environmental refugees mostly from more arid to more humid zones, and responsible for causing social and political conflicts.

Most ECOWAS states are signatories to Inter State Committee to Fight Against Drought in the Sahel (CILSS), and UN Convention to Combat Desertification (UNCCD).

5.4.2 Objectives

To emphasize environmentally sound and integrated local development programmes for drought-prone and semi-arid areas, based on participatory approaches; and on integration of strategies for poverty alleviation and other sector programmes including forestry, agriculture, health, livestock, water supply into efforts to combat the effects of drought.

5.4.3 Strategies for Implementation

Desertification Controls include:

- Sand dune stabilization

- Establishment of wind breaks and shelterbelts
- National Action Progress on desertification to be integrated with other national strategies for sustainable development which are aimed at:
 - prevention and/or reduction of land degradation
 - Rehabilitation of partly degraded and reclamation of desertified land

5.5 Policy for Integration of Forestry and Land Use Planning with Watershed Management

5.5.1 Background

Use of land in West Africa is poorly planned, with resultant inequities, and environmental degradation

There is a high demand to maintain and protect both quantity and quality of water coming from forest ecosystems.

5.5.2 Objectives

Forestry is to be fitted into overarching land-use planning, land capability classes and integrated watershed management.

5.5.3 Strategies for Implementation

- I) Agro-ecological zoning as a basis for the planning of land-use, including forestry in general and protected areas.
- II) Increased recognition of the role of forests in watershed management and the need for collaboration between ECOWAS countries in protecting River sources and managing the major River Basins for the benefit of adjoining agricultural regions.
- III) Major River Basins include: Niger, Senegal, Volta, Chad, with watersheds shared by various countries.
- IV) The complex fountain of the Fouta Djallon highlands of Guinea, sometimes called the "Water Tower" of West Africa, is a key element in maintaining water flows of the Niger, Senegal, Gambia, Kohba River Basins touching 8 countries.

5.6 Forest Industry and Trade

5.6.1 Fuelwood and Energy

5.6.1.1 Background

The predominance of wood & other biomass as a source of energy primarily stems from:

- (a) Its low cost and affordability to low-income consumers
- (b) Its wider availability from forest fallows etc.

Rural industries in the Region rely heavily on biomass for fish smoking, brick-making, curing tobacco, food processing, ceramics and bakeries.

Regional urbanization has increased the demand for charcoal, causing deforestation in peri-urban centres.

Traditional Biomass accounts for 80% of residential energy in 2002 in Africa, about 85% of the total energy consumption of West Africa supplying wood fuels contributes considerably to rural incomes from the production, collection, processing and trading of woodfuel.

5.6.1.2 Objective

- Increased supply of woodfuel on a sustainable basis as well as improved efficiency in its use

5.6.1.3 Implementation Strategies

- I) Establishment of community forests, woodlots to provide fuelwood and charcoal
- II) Improved wood stoves: energy-saving stoves and smoke reduction
- III) Substitution with alternative fuels such as Kerosene, Liquefied Petroleum Gas (LPG), electricity
- IV) Fuelwood Inventory to determine rural fuelwood consumption more accurately most production and consumption take place in the informal sector, and available statistics are not realistic
- V) Integration of wood energy into development planning strategies

5.6.2 Policy on Wood Industry and Trade

5.6.2.1 Background

- I) Wood-based industry in the Region is characterized by a large number of small to medium enterprises, most of them in the informal sector.
- II) Much of the Regions' informal trade takes place with countries outside the continent; while informal border trade in timber products (more or less illegal) seems to be on the increase.

5.6.2.2 Objective

- To explore every option to increase timber yields and improving efficiency through research, technological and managerial innovation; waste minimization.

5.6.2.3 Strategies for Implementation

- I) Provide training and advice to local enterprises in updating skills and technology up-grading to make products
- II) Promote industrial policy that will reduce the export of logs
- III) Forest production is diversified and improved through higher value-addition to timber products, NTFPs.
- IV) Encourage further investments in the forest sector and foster competitive of the sector locally and regionally – reducing waste and adherence to environmental standards
- V) Explore opportunities for harmonizing Intra-Region trade between wood resource-rich humid zone and resource-poor Sahelian zones e.g. to reduce custom levies to boost intra-regional trade.

Nigeria is a major consumer of wood and wood products, and neighbouring countries would gain substantially by catering for this wood demand.

- VI) Streamline movement of wood products through agreements on product standardization and classification and quality assurance
- VII) To facilitate the emergence of a more vibrant Private Sector which should remain the engine for growth in the countries of the Region:
 - (a) to generate rewarding employment
 - (b) to generate profits for further investment

- (c) to enhance human resources development
- (d) to adapt and innovate to remain competitive while meeting environmental standards

5.6.3 Non-Timber Forest Products (NTFPs)

NTFPs provide important subsistence needs of rural communities; contribute to household security and nutrition; help to generate additional employment and income; offer opportunities for processing enterprises; contribute to foreign exchange earnings, and support biodiversity conservation and other environmental objectives; NTFPs are under severe pressure and therefore the need for research on domestication and marketing of NTFPs.

5.6.4 Eco-tourism

National Forests/Reserves, Parks, Nature Reserves underlie the development of eco-tourism. The range of West African ecozones opens up the potential to explore this domain, but complementary efforts in community and private sector involvement, infrastructure development and marketing and publicity should also be deployed.

5.7 Forestry Research, Training and Extension

5.7.1 Background

Most economic activity including forestry has not taken advantage of rapid advances in technology at the global level, because of weakness of the indigenous science and technology capacity

Shortfalls in professional capacity for forestry development need to be addressed. Forestry Research is affected adversely in terms of a "critical mass" of scientists in national forest research institutions.

5.7.2 Objectives

The production of needed technologies and scientific information for achievement of sustainable forest management and sustainable development as a whole.

5.7.3 Strategies for Implementation

- I) The need for adapting the curricula to meet needs of the region for now and the future
- II) Ensure funds for substantial investments in science and technology to support Sustainable forest management

- III) Formal and Informal education to become a means of social change and a vehicle to promote values, attitudes and behaviour patterns, consistent with sustainable development of forest resources
- IV) Training and Education is the best route to follow to empower all stakeholders. Appropriate knowledge and skills needed by all stakeholder groups to be able to manage the forest resources sustainably.
- V) Identifying institutions which are advanced in specific disciplines, and recognizing them as centres of excellence
- VI) Strengthening forest research capacity building and information development and dissemination, especially through the electronic media (contribution of FORNESSA and IUFRO must be recognized).
- VII) Research Coordination

Countries can create synergies by sharing research information, experience and expertise such as through collaborative research projects, networks.

5.8 Mechanisms for Financing Forestry

- Establish Forest Fund for each country
- Taxation Funds
- Highly Indebted Poor Countries (HIPC) Funds
- Bilateral and Multi-lateral Funding
- Livelihood compensation funds for forest fringe communities for prohibition of exploitation in Globally Significant Biodiversity Areas (GSBAs)

5.9 Regional Cooperation and Partnerships

- Collaborative Research Projects between Regional and International Institutions - Box 2
- Managing Transboundary cooperation
 - Streamline movement of products to enhance Intra-Regional trade through agreements on product standardization and classification and quality assurance
 - Collaborative Research to manage and control fires, pests and diseases

- Strengthen the capacity for resource monitoring and Reporting
- To foster cross-border cooperation, an integrated joint task force could be established among the member countries to combat encroachment, poaching, and illegal logging
- Offer the Trans-border Conservation Areas (TBCAs) as tourism destination areas

Box 2

Regional projects for sustaining and enhancing the Resources of Indigenous Hardwoods in West Africa.

In West Africa the amount of primary forest has been seriously depleted and in some countries forest products are becoming scarce. the need to complement a programme of reforestation with more valuable indigenous species. Instead of using unselected stock, this programmes should be firmly anchored to the use of selected promising clones of *Triplochiton scleroxylon*, *Terminalia ivorensis*, *T. superba*, *Nauclea diderrichi* etc.

On behalf of the participating countries (Cameroon, Ghana, Ivory Coast, and Nigeria), Executive Secretary of ECOWAS, hereby request for a Regional Project encompassing a set of national sub-projects, the different scientific facets being coordinated and integrated by the staff of Institute of Terrestrial Ecology, Edinburgh U.K.

The idea is to integrate the expertise gained in Ivory Coast and Nigeria and extend the benefits to include Ghana and Cameroon.

Executive Secretary, ECOWAS
October, 1981

PART VI

MECHANISMS FOR FOREST POLICY IMPLEMENTATION

- Development of National Forest Programmes (NFPs) in ECOWAS member states
 - Status of NFPs in ECOWAS states
 - Promote and support NFP development and implementation
- Institutional/Policy/Legislative Reforms
 - Strengthen public institutions and build their capacity to oversee implementation of policies and legislation
 - Promote partnership with other stakeholders
- Funding Mechanisms
 - To back up forest legislation
- International and Regional Cooperation
 - Technical Cooperation Agreements
- Monitoring and Evaluation
 - Periodic review of policies and their implementation progress (every 7 to 10 years)
 - Monitoring through (quantified) performance Indicators
 - Communication Plans/Information Flow/Networking

USEFUL REFERENCES

- 1) FAO, 1993. Forest Policies in the Near East Region: Analysis and Synthesis
- 2) FAO, 1996. Forest Policies of Selected Countries in Africa. FAO Forestry Paper No. 132
- 3) FAO, 2001: Forest Resource Assessment 2000, main Report, Rome
- 4) FAO, 2002. State of Forests and Wildlife in Africa. African Forestry and Wildlife Commission. FAO Regional Office for Africa
- 5) FAO/AfDB/EC, 2003. Forestry Outlook Study for Africa - Sub-Regional Report, West Africa
- 6) FAO, 2004. Catalysing Regional Action UNASYLVA 218 (58)
- 7) FAO, 2004. Forests and Forestry (Draft for discussion)

New Partnership for Africa's Development

Comprehensive Africa Agriculture Development Programme
- 8) ECOWAS/Institute of Terrestrial Ecology, 1981. Regional Project for Sustaining and enhancing the Resources of indigenous Hardwoods in West Africa
- 9) NEPAD, 2003. African Convention on the Conservation of Nature and Natural Resources
- 10) ODOOM, F. K. 2005. Wood Energy in West Africa – Status, issues and recommendations. Forestry Departmental Group, FAO Regional Office for Africa

APPENDIX

TABLE 1: WEST AFRICAN FORESTS IN 2000: KEY STATISTICS

Country	Total Forest Area in 2000 (000 ha)	Forest Plantation (000 ha)	Natural Forests (000 ha)	Percentage Forest Area (%)	Forest Area Per Capita (ha)	Other Wooded Lands (000 ha)
Benin	2,650	112	2,538	24.0	0.4	3,731
Burkina Faso	7,089	67	7,023	25.9	0.6	7,668
Cape Verde	85	85	0	21.1	0.2	
Cote D'Ivoire	7,117	184	6,933	22.4	0.5	6,620
Gambia	481	2	479	48.1	0.4	161
Ghana	6,335	76	6,259	27.8	0.3	
Guinea	6,929	25	6,904	28.2	0.9	5,850
Guinea-Bissau	2,187	2	2,186	60.5	1.8	
Liberia	3,481	119	3,393	31.3	1.2	
Mali	13,186	15	13,172	10.8	1.2	17,020
Niger	1,328	73	1,256	1.0	0.1	334
Nigeria	13,517	693	12,824	14.8	0.1	9,645
Senegal	6,205	263	5,942	32.2	0.7	12,043
Sierra Leone	1,055	6	1,049	14.7	0.2	4,378
Togo	510	38	472	9.4	0.1	348
Total West Africa	72,155	1,760	70,395	14.2	0.3	43,768
Africa	649,866	8,036	641,830	21.8	0.8	430,079

TABLE 2: EXTENT OF PROTECTED AREAS IN WEST AFRICA

Country	Extent of Protected Area (000 ha)	% of Land (%)
Benin	1,262	11.3
Burkina Faso	2,855	10.4
Cape Verde	0	0
Cote D'Ivoire	1,986	6.2
Gambia	22	2.2
Ghana	1,268	5.6
Guinea	164	0.7
Guinea-Bissau	-	0.8
Liberia	129	1.2
Mali	4,532	3.7
Niger	9,694	7.6
Nigeria	3,021	3.3
Senegal	2,242	11.6
Sierra Leone	153	2.1
Togo	429	7.9
Total West Africa	27,757	5.5

TABLE 3: TRENDS IN INDUSTRIAL ROUNDWOOD PRODUCTION IN WEST AFRICA

Country	1980 (000 m3)	1990 (000 m3)	2000 (000 m3)
Benin	197	274	332
Burkina Faso	308	399	594
Cape Verde	NA	NA	NA
Cote D'Ivoire	5,361	3,548	3,416
Gambia	10	67	113
Ghana	981	1,440	1,087
Guinea	491	541	651
Guinea-Bissau	127	145	170
Liberia	860	1,128	337
Mali	267	357	413
Niger	221	306	411
Nigeria	7,360	8,263	9,418
Senegal	452	638	794
Sierra Leone	158	138	124
Togo	130	185	306
Total West Africa	16,923	17,429	18,186

Source: FAO, 2002

TABLE 4: TRENDS IN WOODFUEL CONSUMPTION IN WEST AFRICA

Country	1980 (000 m3)	1990 (000 m3)	2000 (000 m3)
Benin	5,261	5,977	6,453
Burkina Faso	8,655	10,393	12,600
Cape Verde	106	130	194
Cote D'Ivoire	7,636	8,132	9,284
Gambia	407	571	777
Ghana	12,228	18,424	26,725
Guinea	8,744	10,443	12,248
Guinea-Bissau	1,637	1,996	2,395
Liberia	2,451	3,750	5,173
Mali	3,086	3,942	4,731
Niger	4,446	6,698	9,356
Nigeria	45,863	56,749	67,789
Senegal	4,095	4,687	5,114
Sierra Leone	5,257	5,115	6,018
Togo	4,055	5,049	6,168
Total West Africa	113,948	142,057	175,086

Source: Broadhead *et al.*, , 2001

TABLE 5: SIZE AND DENSITY OF POPULATION IN WEST AFRICA

Country	Total Population 2000 (million)	Density 2000 (inhab/km ²)	Estimated Population 2020 (million)	Density 2020 (inhab/km ²)	Rural Population 2000 (%)
Benin	6.28	54	10.03	89	58.5
Burkina Faso	11.27	44	20.65	75	82.1
Cape Verde	0.44	106	0.62	155	39.5
Cote D'Ivoire	15.95	46	21.81	68	54.1
Gambia	1.29	116	1.99	176	68.2
Ghana	19.20	85	33.37	140	62.2
Guinea	7.42	30	11.52	47	68.0
Guinea-Bissau	1.21	34	1.78	49	76.7
Liberia	3.13	28	5.85	53	52.7
Mali	10.84	9	18.95	15	70.6
Niger	10.85	8	19.06	15	79.9
Nigeria	126.91	121	168.22	182	56.9
Senegal	9.53	48	15.21	77	53.7
Sierra Leone	5.03	68	7.38	103	64.1
Togo	4.67	82	7.61	134	67.3
Total West Africa	234.02	43	344.06	68	60.4

Source: World Bank, 2002; African Development Bank, 2001

TABLE 6: PER CAPITA GNI OF WEST AFRICAN COUNTRIES

Country	Per Capita GNI in 1990	Per Capital GNI in 2000
Benin	360	380
Burkina Faso	290	230
Cape Verde	880	1,330
Cote D'Ivoire	780	660
Gambia	320	330
Ghana	390	350
Guinea	460	450
Guinea-Bissau	210	180
Liberia	-	-
Mali	280	240
Niger	310	180
Nigeria	270	260
Senegal	730	500
Sierra Leone	260	130
Togo	430	300

Source: World Bank, 2002

TABLE 7: SIZE OF THE ECONOMY: GDP AT 1995 PRICES IN WEST AFRICA

Country	GDP in 1990 (million US\$)	GDP in 2000 (million US\$)	Growth rate of GDP 1990-2000
Benin	1,632	2,598	4.8
Burkina Faso	2,002	2,842	3.6
Cape Verde	381	670	5.8
Cote D'Ivoire	9,187	11,890	2.6
Gambia	344	483	3.4
Ghana	5,236	7,978	4.3
Guinea	3,106	4,474	3.7
Guinea-Bissau	217	251	1.5
Liberia	-	-	-
Mali	2,136	3,119	3.8
Niger	1,813	2,197	1.9
Nigeria	24,864	32,184	2.6
Senegal	4,150	5,806	3.4
Sierra Leone	1,370	792	5.3
Togo	1,304	1,479	1.3
Total West Africa	57,742	76,763	2.9

Source: World Bank, 2002

TABLE 8 - i):

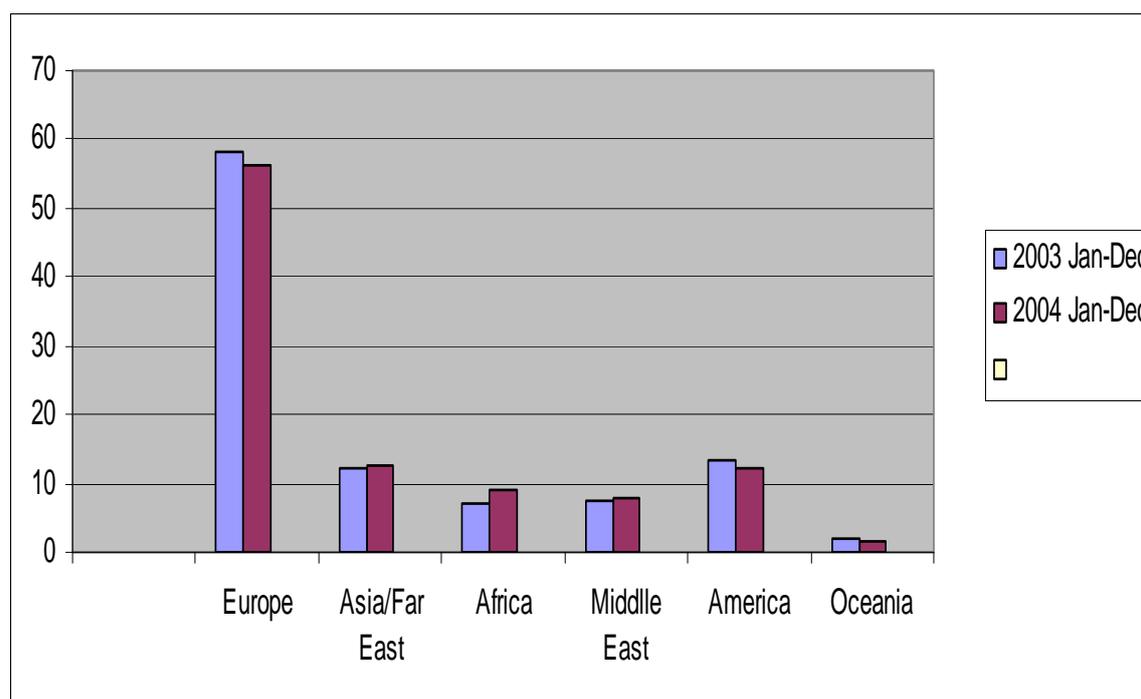
Major Market of Ghana's Wood Production Exports by Value (Euro)

TABLE 8 – ii):

**Export of Wood Products To ECOWAS Countries Jan-Dec
2003/2004**

Country	Jan-Dec	2003		Unit Price	Country	Jan-Dec	2004		Unit Price
	Vol (M3)	Vol (Euro)	Unit Price			Vol (M3)	Vol (Euro)		
Senegal	25.4	5,799,414	228		Senegal	25,576	5,959,032	233	
Gambia	2,823	700,830	248		Gambia	3,356	706,852	211	
Nigeria	17,471	4,729,734	271		Nigeria	17,109	4,572,980	267	
Togo					Togo	78	26,720	343	
Nigeria	19	2,570	135		Niger				
Ivory Coast	57	28,627	502		Ivory Coast				
Sierra Leone	704	119,278	169		Sierra Leone	646	104,960	163	
Burkina Faso					Burkina Faso				
Benin	391	107,067	274		Faso	106	21,276	201	
Mali					Mali	48	2,114	44	