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AFRICAN FORESTRY AND WILDLIFE COMMISSION

SEVENTEENTH SESSION

AFRICAN FORESTRY AND WILDLIFE WEEK

BRAZZAVILLE, REPUBLIC OF CONGO
22-26 February 2010

African Forests and Wildlife: Response to the Challenges of Sustainable Livelihood Systems

PROVISIONAL AGENDA

1. Opening of the 17th Session of the African Forestry and Wildlife Commission (AFWC) and of the first African Forestry and Wildlife Week (AFWW)

2. Adoption of agenda

3. Election of officers

4. Forestry and wildlife in support of sustainable livelihood systems in Africa:
   - (i) protected areas and the livelihoods of local communities
   - (ii) ecotourism and its potential for conserving forests and wildlife and alleviating poverty
   - (iii) the role of non-wood forest products in food security and poverty reduction in Africa
   - (iv) bioenergy and forests in Africa
   - (v) sharing lessons from forestry and wildlife-related activities in Africa:
     a. integrated management of forests and wildlife for conflict prevention and maximization of benefits
     b. invasive species and their economic relevance for and impact on forests and wildlife in Africa

c. wildlife legislation and the legal empowerment of the poor in sub-Saharan Africa

5. African forestry and wildlife: reflections on their sustainable management and benefits: *(Special AFWW day issues)*

   (i) keynote statements from international and regional body representatives
   (ii) forestry and wildlife policies in Africa: presentations by African regional economic communities
   (iii) Heads of Forestry Dialogue - *African forestry institutions: capacity development to meet the challenges of a changing world*

6. FAO activities in the Africa Region:

   (i) AFWC secretariat report on actions taken on the requests and recommendations of the 16th Session of the Commission
   (ii) forest resources assessment and monitoring
   (iii) national forestry policies, programmes and participatory processes
   (iv) regional and country projects

7. Climate Change, Forests and Wildlife in Africa: summary and recommendations of the pre-session workshop and future actions for the Commission

8. Regional issues identified by the 17th Session of the AFWC for the attention of the 26th Regional Conference for Africa and of the 20th Session of the Committee on Forestry

9. Any other business

10. Date and place of next session

11. Adoption of the report of the 17th Session of the African Forestry and Wildlife Commission

12. Closure of the session and of the African Forestry and Wildlife Week

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Contents:

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(1) PROTECTED AREAS AND THE LIVELIHOODS OF LOCAL COMMUNITIES

a) Background

The International Union for Conservation of Nature defines a protected area as: *"an area of land and/or sea especially dedicated to the protection and maintenance of biological diversity, and of natural and associated cultural resources, and managed through legal or other effective means."* Protected areas help to conserve biological diversity and have significant impacts on the surrounding local populations as well as socio-economic development at national level. The process for establishing PAs and defining management structures normally encompasses the control of access, user rights and ownership issues. Good collaboration between governments and local communities is thus central to successful implementation.

b) Impacts:

i. The fact that forests are often located in remote rural areas, where poor people also live, means that the livelihoods of the latter are largely dependent on these resources. Population increases over time, especially among the rural populations, significantly increases the pressure on forest resources for grazing and cultivation and the demand for forest products. Establishing and/or maintaining PAs with a predominantly protectionist approach that does not take into consideration the plight of local communities, makes the latter more vulnerable to food insecurity and chronic poverty.

ii. Rules and regulations governing PAs quite often restrict, and in some cases prevent, the right of access or use by local communities. This in many cases escalates conflicts and increases illegal practices of harvesting forest products and hunting wildlife.

iii. In many countries, the negative impacts of prolonged drought as a result of climate change have led to a reduction in available pasture and water for domestic animals, wildlife and people, often resulting in escalations of human-wildlife conflicts.

c) Challenges:

i. Forestry and wildlife sectors are often managed by different government agencies and governed by different legal instruments. These laws may have varying and at times conflicting approaches towards community participation in resource management, which may curtail the equitable use of resources.

ii. Weak state and community institutional capacities pose a serious challenge for the adequate enforcement of existing rules and regulations. This exacerbates illegal practices.

iii. Many PAs are created or managed without taking into account the views of local communities or ensuring their involvement in decision-making processes. This tends to alienate their customary rights of access to resources and traditional practices in the PAs. The challenge therefore is to keep the communities informed

and ensure that they are sensitive and responsive to the integrity of the PAs, thereby reducing the grounds for conflicts.

iv. Some countries have policy frameworks that assign responsibility for conservation of PAs to local communities. Such an approach should seek to ensure equitable benefit sharing with local communities.

d) Opportunities:

i. Local communities are the main repositories of traditional indigenous knowledge and good practices in the management of forest and wildlife resources. If this precious resource is coupled with contemporary scientific knowledge, the impact would be extremely positive for both local community sustainability and national development.

ii. The involvement of responsible private sector forestry enterprises could open up good economic opportunities, such as employment for local communities. This could greatly reduce the costs associated with PA management.

iii. Enabling legal frameworks that provide secure tenure and equitable sharing of benefits with communities make the latter the best advocates and guardians of the integrity of a PA. With the existing opportunities for payments for environmental services, including payment for water, carbon and ecotourism, there is potential for the sustainable management of PAs.

e) Pan-regional recommendations to resolve the issues being addressed

i. There is a need for much greater government commitment to improve the productive and recreational value of forests and wildlife and to invest in rural infrastructure to improve opportunities for business, market access and employment for poor local communities, in order to provide tangible economic benefits to the populations living near the PAs.

ii. It is important for governments to plan and manage PAs with the active involvement of local communities and other key stakeholders in a productive relationship. Collaboratively working together can achieve effective fire management and forest management, a coordinated response to illegal activities and sharing of benefits accruing from these efforts.

iii. There is a need to invest in human resource empowerment programmes that provide appropriate training to government forestry and wildlife staff in practical approaches to participatory and collaborative management of PAs. This would enable them to prevent and manage conflicts, build trust and foster cordial relations with other stakeholders, especially the poorer community members. Governments' responsibilities towards local communities can be enhanced by providing moral and administrative support to NGOs' in the latter's efforts to facilitiate the access by communities (both men and women) to information and skills so as to benefit from PAs while conserving biological diversity.

iv. In some countries there is a need to harmonize and improve policy and legal frameworks of related institutions/agencies (such as Wildlife Acts, Land Acts and Forest Acts), in order to balance the protectionist approach while actively facilitating stakeholder involvement in resource management and establishing genuine benefit-sharing mechanisms.

v. Governments need to promote increased sharing and exchange of knowledge with other countries on good models of PAs that are robust, meaningful and based on power sharing between governments and local people. This would help strengthen their PA systems.

vi. There is a need to build and promote governance structures (at national and local levels) that are based on transparent management, decision-making, financial accounting and accountability practices and sharing of proceeds. Similarly, ownership and access rights of communities to PAs should be legally established from the outset.

vii. There is a need to set up generic strategies for the participation of communities living around PAs in decision-making processes. This participatory strategy should take into consideration aspects of:

- awareness raising for communities living in and around the PA;
- public participation in implementation of initiatives;
- participation in planning for mitigation and compensation of socio-economic as well as environmentally adverse impacts;
- participation in monitoring and evaluation.

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(2) ECOTOURISM AND ITS POTENTIAL FOR CONSERVING FORESTS AND WILDLIFE AND ALLEVIATING POVERTY

a) Background, issues and facts:

i. Tourism has grown enormously over the past two decades and is nowadays the world's largest industry, with nature tourism one of the fastest growing segments. In particular, *wildlife watching* tourism has grown dramatically over recent years.

ii. In Uganda, where about 60% of the estimated 720 remaining mountain gorillas live, the annual income from gorilla viewing treks increased from US$113.000.000 to 400.000.000 in 2007, an increase of 36% per year (Hon. Serapio Rukundo, Minister of Tourism, Uganda). Altogether, Uganda receives about 20,000 visitors per year to apes. In 2007, permits brought in $4.7 million. Hotels and services created 70,000 jobs. Revenue sharing has funded 181 community projects - clinics, schools, community centres, bridges, roads, maize mills and a water project. Tourism now tops foreign exchange earnings (Source: Uganda Wildlife Authority, 2008). In this way, ecotourism positively contributed to gorilla conservation and livelihoods generation.

iii. Ecotourism can be distinguished from nature tourism by its emphasis on conservation, education, traveller responsibility and active community participation. Specifically, ecotourism has the following characteristics:

- conscientious, low-impact visitor behaviour
- sensitivity towards, and appreciation of, local cultures and biodiversity
- support for local conservation efforts
- sustainable benefits to local communities
- local participation in decision-making
- educational components for both the traveller and local communities

iv. Many nature tourism activities are not ecotourism as they are not (fully) based on the above listed principles.

v. In general, ecotourism is understood as a *non-consumptive* use and enjoyment of nature with *wildlife watching* activities at its centre. However, under certain conditions and following strict rules *consumptive* use may also encompass the above listed principles (e.g. hunting or fishing tourism). Therefore, it is advisable to avoid the convergence in a given area or time of hunting and wildlife observing tourists.

b) Challenges and threats:

i. In the absence of appropriate planning and management, high levels of tourism in natural ecologically sensitive areas can pose a real threat to the integrity of both ecosystems and local cultures and the environment, with the risk of local communities and indigenous cultures being harmed in numerous ways by a sudden influx of foreign visitors and wealth.

ii. Heavy dependence upon tourism revenues can be risky because of periodic fluctuations in visitor numbers as a result of economic and political changes, social unrest or environmental disasters.

iii. Adequately funded protected areas and wildlife observation sites are fundamental to meaningful and effective wildlife conservation and tourism management. A key consideration is that local communities must receive sufficient benefits for their development.

iv. The UN World Tourism Organization (WTO) lists seven elements that need to be in place to enable the economic benefits of tourism to reach the poor. The main ones are:

- employment of the poor in tourism enterprises;
- supply of goods and services to tourism enterprises by the poor or by enterprises employing the poor;
- direct sales of goods and services to visitors by the poor (informal economy);
- establishment and running of tourism enterprises by the poor;
- tax or levy on tourism income or profits with proceeds benefiting the poor;
- voluntary giving/support by tourism enterprises and tourists; and
- investment in infrastructure and social services stimulated by tourism also benefiting the poor in the locality, directly or through support to other sectors

c) <u>Opportunities</u>:

i. Substantive ecotourism growth creates significant opportunities for both conservation and local community development. Ecotourism can provide much needed revenues for the protection of national parks and other natural areas, revenues that might not be available from other sources, and can provide a viable economic development alternative for local communities with few other income-generating options.

ii. Much of the wildlife that tourists want to watch is located in rural areas. These tend to be poorer than urban areas, and to offer fewer employment opportunities. In such areas, ecotourism can potentially provide an alternative source of income and employment.

iii. Besides direct expenditures by ecotourists, there are other relevant economic benefits such as the stimulation of supporting economic activities, promotion of tourism to a country or region, and the protection of environmental services as a result of the incentives provided by ecotourism.

iv. Ecotourism can increase the level of education and activism among travellers, making them more enthusiastic and effective agents of conservation.

v. The role of *protected areas* as key locations for good practices in sustainable tourism and biodiversity conservation should be taken advantage of.

d) Recommendations to the Commission:

i. Carefully evaluate if ecotourism is an option in a given area and what kind is most promising by considering the special features of the location and experiences from similar projects.

ii. Fully adhere to and respect the agreed upon principles of ecotourism and sustainable tourism when planning tourism development in natural areas of great public interest.

iii. Find ways to generate sufficient meaningful revenues to reduce the threats of forest and biodiversity degradation from local communities in remote areas.

iv. Ensure effective participation of local communities in ecotourism development, including full consideration of local providers.

v. Encourage all stakeholders, particularly the private sector, to support the conservation of biodiversity and channel a portion of tourism revenues towards supporting conservation.

vi. Diversify economic activities to reduce over-dependency on tourism, e.g. by promoting non-wood forest products.

(3) THE ROLE OF NON-WOOD FOREST PRODUCTS IN FOOD SECURITY AND POVERTY REDUCTION IN AFRICA

a) Background:

i. Rural populations of Africa depend on access to forests to meet their daily subsistence, employment and cash income needs. The main products extracted by forest-dwelling people are fuelwood, poles and non-wood forest products (NWFPs), including bushmeat.

ii. Particularly in times of crisis, NWFPs are a major source of supplementary income and work for those unable to obtain formal employment. They also provide food, medication and other products and services for household, cultural and subsistence use, acting thus as a "safety net". However, economic crises aggravate conflicts among, and between, subsistence and commercial users by creating increased dependence on and competition for NWFP resources.

iii. Free access to forest resources must be guaranteed for poor forest-dependent people so as to reduce poverty and help to diminish the negative impacts on rural households in Africa of the global financial and economic crisis. The improvement of a legal framework for governing subsistence use with commercial use of NWFPs, while safeguarding people's rights of access and preventing depletion of the resources, is a fundamental prerequisite for the sustainable and socially equitable development of the NWFP sector in Africa.

b) Contribution of NWFP to improved livelihoods:

National economies and trade

i. Data on NWFPs are rarely included in national production and trade statistics, so their contribution to GDP is poorly known. However some research by FAO has shown that NWFPs are of great economic importance to rural households, traders and the national economy of several African countries (FAO 2002: http://www.fao.org/forestry/13473/en/).

Household economies

ii. The importance of NWFPs is most visible at the household level. For instance, Tieguhong found that in five villages surrounding Lobeke National Park in Cameroon, household-consumed goods represented 44.6 percent of the cash flow to surveyed households. Goods associated with shelter and food security dominated the income generated by the households, with forest products being the main and most valuable source of them (Tieguhong and Zwolinski, 2008).

iii. NWFPs have a major role in rural employment, mostly in the informal sector. Rural women in particular form the bulk of the workforce, gathering and processing NWFPs and are likely to be the main beneficiaries or losers from forest resource management interventions that may negatively affect (free) access to the forests.

c) Opportunities for national and regional actions by countries:

Improving the Legal framework: the case of Central Africa

i. While NWFPs were primarily used for subsistence, centuries-old informal rules and customary practices were sufficient for overall use and stewardship of the forests by many diverse user groups. However, the traditional regulatory framework is no longer adequate to deal with the needs of the increasing social, economic, environmental and developmental complexities of modern-day Africa. The weaknesses inherent in the traditional regulatory frameworks unfortunately remained largely unaddressed by the national forest codes and legislations elaborated in the 1990s that were more geared to timber products and were less participatory.

ii. Through a fully participatory process within a recently completed regional project (2006-2008; http://www.fao.org/forestry/50255/en/) in six Central African countries, major forest stakeholders and representatives of governments, the private sector and local people's associations have developed an innovative model law – *Directives sur la gestion durable des produits forestiers non ligneux en Afrique Centrale* – which is not only designed to promote business development but also to protect the rights of the weakest segments of society to access forest resources for their subsistence needs (http://www.fao.org/forestry/webview/media?mediaId=14283&langId=1 FAO, 2008). This serves as a blueprint that could be adapted to national circumstances for integration in national forest legislation in all African countries. The model law was endorsed by all 10 COMIFAC countries[1] in November 2008. Cameroon and the Democratic Republic of the Congo are already in the process of adapting and implementing the legislation at the national level, and three more countries (Congo, Gabon and Central African Republic) are beginning to do so. The model legislation is intended to supplement relevant traditional customary rights and enables self-employment in the commercialization of NWFPs to become formal and legal.

d) FAO Support

i. One of the major initiatives founded by member countries and supported by FAO is the NGARA network (Natural Gums and Resins in Africa) that was established in May 2000 to assist African producer countries and partners to formulate a co-ordinated strategy for the sustainable development of their natural gums and resin resources. NGARA is bringing together 15 member countries, including representatives of farmers/ collectors, traders, governments, research, NGOs, exporters and importers. The Kenya Forestry Research Institute (KEFRI) in Nairobi hosts the NGARA secretariat (www.nagara.org.)

ii. Additional institutional support that FAO provides to help countries improve their NWFPs sector and related legislation includes:

- capacity-building for actors involved in NWFP value chains;

[1] Burundi, Cameroon, Central African Republic, Chad, Congo, Dem. Rep. of Congo, Equatorial Guinea, Gabon, Rwanda, Sao Tome and Principe

- promotion of local community participation in all aspects of forest management, and sharing of benefits derived from forest products;
- analysis of institutional factors that favour or impede access to benefits along the value chain;
- initiatives to ensure access to resources and to empower weaker rural populations and minority groups, especially once NWFPs values become important;
- dissemination and implementation of the legal framework, including identification of inequities in trade transactions in terms of selected commodity chains.

e) <u>Conclusions</u>

i. Many African governments are now committed to NWFPs development, although most countries still do not have the resources and capacity to carry out their large-scale commercial production and processing . The NWFPs sector can benefit greatly from such opportunities if African countries can fully invest in them and tap the benefits by developing local technologies, increasing quality standards of products and recognising/retaining property rights to their products. A major problem is to translate these policies into concrete development activities on the ground.

ii. The sector involves numerous collectors, using simple tools and requiring little investment, who can easily adapt to changing economic patterns to improve their livelihoods. However, an appropriate legal and institutional framework must be in place to prevent the weakest segments of society from exclusion and to avoid resource degradation. The Ngara Network and the NWFP model law project in Central Africa have piloted a participatory process for incorporating rights-based legislation into national government programmes.

f) <u>Recommendations on actions needed to increase the contribution of NWFPs to food security and poverty reduction in Africa</u>:

i. The **supply** of Non-Wood Forest Products (NWFP) needs to be increased by stimulating rural communities to incorporate NWFP species into their farming systems. Domestication, tree improvement programmes and clarifying land tenure will be necessary pre-conditions for increasing the supply of NWFPs.

ii. There is a need to enhance more **networking** in the region to exchange information and help develop/ disseminate appropriate technologies to improve productivity along the production, processing and marketing chain and make them easily available and intelligible for rural communities and the private sector.

iii. Disseminate appropriate **techniques** for managing, gathering and harvesting NWFPs in forests, thereby contributing to more sustainable production and to sustainable forest management.

iv. There is a need to improve **marketing strategies** and incomes of rural communities in Africa by helping them to take advantage of selling NWFPs at regional markets, analyze and capitalize on market trends, take advantage of value chain

analysis and to get involved in group marketing which will maximize the benefits from NWFPs for the prosperity of the communities.

v. There is a need to improve the **legal framework** governing NWFPs in order to ensure increased traditional user rights and benefits from the commercialization of NWFPs.

vi. To achieve sustainable forest management in Africa, more multi-stakeholder **participatory approaches** are necessary to reconcile livelihood improvement and resource conservation.

vii. Ensure consistent NWFPs supply for **income generation**, by providing relevant technical support and business development advisory services as well as production coordination and quality control.

viii. There is a need to invest more in **Research and Development** (R&D) for improving supply and to increase the benefits of NWFP-based income generation.

ix. The **regulatory environment** for NWFPs (such as quality control and documentation of origin) needs to be more consistent and predictable.

x. NWFPs need to be included in **policies and strategies** developed by African countries themselves such as the strategic document to fight against poverty (DSRP) and in **national forest and food security programmes.**

xi. At the country level, there is a need to **stimulate collaboration between all ministries involved** directly or indirectly in NWFPs value chains.

xii. There is a need to **raise awareness** on and promote NWFP in **the African sub-regional economic cooperation agencies** (such as Economic Community of West African States (ECOWAS); East African Community (EAC); Southern African Development Community (SADC); Economic Community of Central African States (ECCAS); Intergovernmental Authority on Development (IGAD); Economic Commission for Africa (ECA); the Economic Commission of Central Africa (CEAC); Central Africa Forestry Commission (COMIFAC), the Congo Basin Forest Partnership (CBFP) etc.

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(4) BIOENERGY AND FORESTS IN AFRICA

a) Background

i. The need to develop sustainable forestry, agriculture and renewable energy programmes remains at the strategic forefront of most governments and leading companies, in Africa and around the world. New technology platforms for bioenergy have reached commercial scale and Africa is well placed to benefit from these technologies to grow more food, rejuvenate its vast land resources and further strengthen its economies via new, home-grown energy sources.

ii. Overcoming energy poverty is one of Africa's greatest challenges. Improving Africa's energy situation is vital if we are to achieve the Millennium Development Goals. On the positive side, Africa has a vast, largely untapped, potential of both renewable and non-renewable energy sources which remains vastly under exploited (OECD 2009).

b) Main issues

Woodfuel is the major source of energy for African countries

1. Fuelwood and charcoal, account for over 80 percent of total African wood production (FAO, 2006a). In 2000 the consumption of fuelwood (including wood for charcoal production) was estimated at about 526 million m^3 and this increased to 603 million m^3 in 2007 (FAOSTAT 2009). By 2015, the International Energy Agency (IEA) predicts a further 54 million Africans will be dependent on traditional biomass (IEA 2006). This surge in consumption comes primarily from: (i) rapid population growth and (ii) slow industrial and service sector growth.

Woodfuel production and consumption has impacts on deforestation and climate change

2. The main causes of the destruction of forests and trees are the demand for land of ever-increasing populations and the unplanned use of resources and raw materials such as food, fodder, timber and fuels, which are vital for the livelihoods of urban and peri-urban dwellers. Deforestation in the tropics (including Africa) accounts for 18 percent of carbon dioxide emissions due to human activities (IPCC, 2007). Reducing deforestation is just one of a portfolio of mitigation measures needed to reduce concentrations of greenhouse gases in the atmosphere, but it is a very important and critical one.

New energy services for Africa's poor are urgently required

3. Existing wood energy systems are usually subsistence-oriented, unhealthy, unsafe and unsustainable in nature. The use, production and collection of wood energy can have serious health impacts, which mostly affect poor women and children. If properly managed and modernized, the existing systems can become clean, efficient, safe, healthy and sustainable. They can also contribute to increased energy security and

rural development for Africa, as well as reducing greenhouse gas emissions and, consequently, contribute to climate change mitigation.

Africa has huge potential for large-scale bioenergy production and supply

4. Smeets et. al 2006 report that the most promising regions for the large-scale supply of bioenergy are sub-Saharan Africa, the Caribbean and Latin America and East Asia. In sub-Saharan Africa and the Caribbean and Latin America the potential originates from the large areas of land suitable for crop production, despite the projected increase in population and consumption to 2050.

5. The international bioenergy market is creating great opportunities for innovations in the traditional use of forests and agriculture products. Wood will become an even greater source of energy as soon as new technologies for the conversion of lignocellulosic biomass into liquid biofuels (the so called "second generation" technologies) and other forms of energy become economically viable and available in the market.

Increased production of bioenergy may lead to conflicts and competition

6. Forests occupy land which could be used for crops that produce liquid biofuels. National policies and programmes on bioenergy contributing to energy security, climate change mitigation, food security, forest and biodiversity conservation, and the domestic supply of industrial round wood, as well as other policies related to land use and conservation, may also enter into competition with each other.

Conclusions & recommendations

7. Bioenergy production on a commercial scale in Africa is a fairly new idea but one that opens up a lot of opportunities for both investment and local economic development. However there are many challenges that need to be overcome before energy security can be achieved from renewable energy. The main challenges include:

   i. making bioenergy policies and programme inclusive;
   ii. ensuring collaboration between different sectors;
   iii. ensuring regulated land use; and
   iv. making available reliable data and appropriate institutional capacity.

Discussion items for the Commission

8. To address these challenges African countries should consider the following actions to enhance sustainable wood energy production and consumption:

→ enhance national and regional capacities for the development, implementation and monitoring of wood energy systems;
→ enhance statistics and information systems for assessing the technical, economic, environmental and social aspects of wood energy for the formulation of sound wood energy (and bioenergy) policies;
→ adopt new methodologies for the development of wood energy policies and strategies, such as the Woodfuel Integrated Supply/Demand Overview Mapping (WISDOM), which would help develop the wood energy sector in line with sustainable forest management concepts;
→ promote the transfer of know-how in the use of sustainable, efficient and healthy wood energy systems;
→ expand and adopt the development of sustainable bioenergy systems through policies, laws, programmes and projects which are properly integrated with energy, agriculture, forest, environment and poverty reduction policies;
→ introduce safeguards for the production of bioenergy to avoid unwanted negative impacts on the environment and local populations and
→ consider trade-offs between the different land-use options, when embarking on large-scale biofuel production.

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(5) INTEGRATED MANAGEMENT OF FORESTS AND WILDLIFE FOR CONFLICT PREVENTION AND MAXIMIZATION OF BENEFITS

a) Introduction

i. Forests, being wildlife sanctuaries, have great potential for generating revenues and contributing to poverty alleviation and sustainable development. Many countries in Africa gain large incomes from activities such as eco-tourism and hunting, and in almost every country in Africa bushmeat forms an important contribution to people's food security.

ii. However, particularly at the edge of forest areas and around protected areas, wildlife also poses threats to farmers through human-wildlife conflicts (HWC). Such conflict emerges when wildlife's requirements overlap with those of humans, with consequent costs to people and wild animals. In Africa, where many people's livelihoods are directly dependent on the natural environment, wildlife species, such as elephants, lions, crocodiles and hippos invade human settlements and raid crops, cause damage to personal belongings, injure or kill livestock or kill people. The loss of assets and of human life, and the cost of the conflict with wildlife in terms of time and energy expended on the protection of crops and assets, increase the vulnerability and impede the economic development of affected communities. The conflicts also foster a negative attitude among local people towards wildlife management and conservation initiatives proposed by the government and other conservation authorities. This in turn can lead to non-cooperation of local communities and increased instances of poaching and other illegal activities.

b) Challenges

The imperative to minimize the social, environmental, economic and political costs of conflict and to find solutions to this growing problem is now even greater.

i. To reduce HWC itself, as well as related conflict between managers and communities, and minimize the impact when it occurs, there is a need for **integrated management.** This would also allow communities to benefit from forests and wildlife and therefore compensate them for the cost of living with wildlife.

ii. Different methods for HWC prevention and mitigation, as well as for wildlife valorisation through ecotourism and hunting, are nowadays generally known and practiced in numerous countries. The most significant **constraints** to their effective implementation in other countries are often weak institutional frameworks, out-of-date legislation, centralised power and a lack of national strategies aimed at tackling the issue.

iii. There is a recognised need for **clear policies to engage public and government** interest in integrated and sustainable management of forests, wildlife and protected areas. There is also a need for capacity building and awareness raising to enhance stakeholder participation in policy formulation and implementation.

iv. **International exchange and communication and multilateral collaboration** on these issues can help to define common objectives and identify/formulate appropriate programmes to achieve these objectives.

c) Conflict Prevention

There are three strategies for HWC management:

- *Protection* against problem animals, usually in the form of fences or other barriers between conservation areas and human settlements, or physical guarding, use of deterrents, lethal control of problem animals, and eventually wildlife or human relocation.
- *Mitigation*, whereby techniques are implemented and schemes developed which will result in less damage by the animals, and/or less resentment by local people. Examples of compensation schemes include: insurance programmes, incentive programmes and community-based natural resources management schemes.
- *Prevention* of conflict through large-scale land use planning. Eventually, the best way to resolve conflicts between humans and wildlife is to use a decentralized, farmer-based approach, which uses features of all three of these strategies.

All these strategies and techniques need effective awareness campaigns for sensitizing the communities and training programmes to build their capacities.

d) Maximization of Benefits

i. Conservation of forests and wildlife is often reliant upon external funding, which carries the risk that, once funding is discontinued, the conservation areas fall into desrepair and wildlife and other natural resources are again threatened. A general tendency nowadays regarding the conservation of biodiversity is the principle that preservation of wild areas needs to bring some tangible benefits to the local communities and be able to at least partly fund itself.

ii. Conventional mechanisms through which this can be accomplished are eco-tourism and trophy hunting. Payment schemes for ecosystem services such as maintaining hydrological functions and opportunities for carbon sequestration are another way of placing a value on ecosystems, but are often not directly related to high biodiversity values.

iii. Wildlife and biodiversity in general often have a relative value, which should be seen in the context of its location. For example, high numbers of common ungulates in an ecosystem, might have a low value in the eyes of conservationists, but can be highly important for local communities' protein supply. Generally speaking, a well-functioning natural environment supports people's livelihood. Many conservation and development projects focus on the joint objective of development of communities and conservation of natural resources, the so-called 'Integrated Conservation and Development approach'. The main challenges to implement these programmes is to ensure equitable sharing of benefits from natural resources management down to the lowest community levels, and that there is adequate management capacity at all levels.

iv. An important aspect of facilitating the mechanisms through which wildlife can contribute to income generation and poverty alleviation is formulating appropriate policies to regulate and allow for practices such as the regulated sale of game meat, the issuance of licenses for trophy hunting, the issuance of permits to start game farms and private investment in the exploitation of wildlife areas for eco-tourism and hunting. In order to overcome difficulties with regard to the protected status of certain species and associated limited quotas, countries should increase

their capacity for scientific monitoring programmes and form partnerships with each other and influential international institutions to adequately use global regulations for their benefit.

v. Building of new private-public partnership is also a prerequisite for maximization of benefits from natural resources management.

e) Some Recommendations

Below are a few recommendations for the management of human wildlife conflicts. They are however not all-encompassing, and are dependent on site-specific circumstances, such as which species is involved, the protection status and the monetary costs.

i. ***Formulate policy on HWC***. A **clear policy** needs to be designed or strengthened on how a country will deal with HWC. A helpful tool in such a policy could be a **decision support process**, to determine what needs to be done about HWC inside and outside conservation areas and what actions should be taken if HWC occurs. Approaches to manage conflicts and maximize the benefits from natural resources management should be as integrated as possible, taking into consideration the specificities of different sectors (wildlife, forestry, agriculture, transport etc.).

ii. ***Establish land-use plans.*** **Effective designation of areas** for the conservation and management of wildlife and natural resources and for the development of human activities. If HWC occur in areas of human activities, means need to be sought to prevent or mitigate them. Inside protected areas, people need to be educated about strategies and risks of living with wildlife.. It is useful to designate 'buffer zones' around protected areas, where people can develop certain activities but are aware of the risks of living in close proximity to wildlife populations.

iii. ***Facilitate income generation from wildlife***. In order to improve people's attitude towards wildlife and conservation efforts, it is necessary to **create benefits for communities from wildlife**. Conservation should not exclude economic growth. If conservation and economic goals cannot be achieved in harmony, people will choose the economically most attractive option, which often involves resistance to conservation efforts and engagement in illegal activities.

iv. ***Remove wildlife or humans from high-risk or unsuitable areas.*** Wildlife populations are often too large to be maintained in the area designated for them. If necessary, such populations need to be reduced and/or relocated in the most humane and cost-effective manner.

v. ***Implement strategies to prevent or mitigate HWC.*** If management of conflicts between wildlife and humans is necessary, people need to be better informed of their options to prevent or mitigate HWC and payment systems need to be put in place to compensate people for damages . Financial resources for the implementation of such strategies can be income from eco-tourism income, sports-hunting or insurance schemes.

(6) INVASIVE SPECIES AND THEIR ECONOMIC RELEVANCE FOR AND IMPACT ON FORESTS AND WILDLIFE IN AFRICA

Abstract

1. The problem associated with invasive species has become a matter of serious concern globally because of the threat to biodiversity and other human interests. Quite a number of species introduced deliberately or accidentally to Africa have become invasive. The cost of invasive species, estimated in terms of loss of forest, wildlife and agricultural products, habitats destroyed and the resultant loss of environmental services they provide, as well as cost associated with monitoring and management runs into billions. As part of efforts to mitigate the impact of invasive species on Africa, the Forest Invasive Species Network for Africa (FISNA) was formed to ensure that resources and information are freely shared across the continent. In order to make the network a truly continental body for combating the menace of invasive species support is required from policy makers, administrators and all stakeholders from across the continent.

Introduction

2. Invasive species may be generally described as biotic agents that occupy new environments or habitats and cause harm to the habitats or human interests. They include all categories of life such as land plants (trees, shrubs, herbs, grass), aquatic plants, insects, molluscs, birds, fungi, reptiles, amphibians, crustaceans, and microorganisms. Invasive species are introduced intentionally or unintentionally to new environments. Invasive species are recognized as a major threat to the world's biodiversity. They are also of significant socio-economic impact around the world. The problem of invasive species has been around for as long as man began to discover lands other than their own native abode. However, the number species that are becoming invasive, as well as the extent of habitats being invaded have risen astronomically in recent decades. To a large extent this increase can be attributed to increased international trade and globalization.

Invasive species on the african continent

3. A significant number of invasive species have been introduced to the African continent, some of which are having serious economic, environmental or ecological impact in the countries or regions where they are found (Bosu, et al., 2009). Major invasives on the African continent include plants such as pumpwood (*Cercropia petalta*), which was deliberately introduced to Côte d'Ivoire and several other west and central African countries during the early part of the 20th Century as shade tree in coffee plantations; *Prosopis* species which were introduced for agroforestry and landscape restoration in East Africa; paper mulberry (*Broussonetia papyrifera*) introduced to Ghana and Uganda for pulp paper production, and Leuceana (*Leucaena leucocephala*)introduced to many countries in Africa and around the world as multipurpose species for agroforestry. Siam weed (*Chromolaena odorata*) and Lantana (*Lantana camara*) are examples of serious invasive species which were unintentionally introduced to the continent. Aside from introduced plants, invasive insects and pathogens have also had significant impact on Africa's forests. These include the oriental scale insect (*Aonidiella orientalis*), which devastated neem trees in the Lake Chad Basin during the 1980s, and the cypress aphid (*Cinara cupressivora*) which attacks cypress, junipers and other species

in Eastern Africa. These are very serious invasive species on the continent. Other invasive insects include the blue gum chalcid (*Leptocybe invasa*) on Eucalyptus in eastern Africa, and more recently the Sirex wasp (*Sirex noctilio*) and bronze bug (*Thaumastocoris peregrinus*) which have emerged in South Africa (Wingfield et al. 2008) as major threats to plantations.

4. In South Africa, the pathogen *Phytophthora cinnamomi* infects native fynbos areas, as well as forests in the Tsitsikamma region and kills *Ocotea bullata* trees. This fungus has also spread into commercial forestry plantations throughout the country (Von Broembsen, 1984; Von Broembsen & Kruger,1985; Linde, et al. 1999). Another example of an introduced fungus causing problems in native ecosystems is that of *Armillaria* spp. in the Fynbos region of South Africa (Coetzee, et al 2003). In Ghana, emerging diseases with potential to cause major destruction to teak (*Tectona grandis*) and cedar (*Cedrela odorata*) plantations are known to belong to *Phytophthora* and *Armillaria* groups (Table 2).

Impact of invasive species

5. Invasive plants often become dominant understorey vegetation in disturbed native forests, disrupting natural succession patterns and causing biodiversity loss (Bosu et al. 2009). They often form dense stands that displace native species and reduce food and shelter needed by native wildlife, including endangered species. The increase in invasive species may cause crowding out of other species. There may not be an increase in number of species but an increase in vegetation cover due to the aggressive nature of the species. As a result habitat quality and ecosystem health may decline. Some invasive species have allelopathethic properties and are able to reduce the vigour and productivity of nearby plant species in orchards and plantations.

6. Some invasive plants generate higher fuel loads than native plants. When these plants invade, wildfires can be more frequent and sometimes catastrophic. Invasive species such as Lantana and siam weed harbour dangerous pests and diseases of crops and livestock. Invasive insects and fungi generally attack and kill trees in orchards, plantations, or natural forests and cause substantial ecological and economic losses. Some invasive plants are known to consume enormous quantities of water and their presence in an ecosystem lead to loss of water to wildlife, forestry, agriculture, and even drinking water supply to communities and cities. A typical example is Prosopis species which was deliberately introduced to several countries in East Africa during the 1970s, which has now invaded and colonized large tracts of land in countries like Sudan, Ethiopia and Kenya. The long, powerful and poisonous thorns of the plant negatively affect wildlife as well as domestic animals. Additional problems of Prosopis include drying of soils, blockage of water flow in rivers, losses to the fishing industry as the plant takes a lot of water, blockage of irrigation canals, obstruction of roads, trails and other communication channels.

7. Globally, losses due to invasive species run into billions of United States dollars annually. This is cost due to direct losses to agriculture, forest and wildlife resources. It also includes cost of management, monitoring and control. Indirect cost due to environmental destruction, species extinction, loss of ecosystem services, ecotourism, is equally huge. It has been estimated that the United States loses about 138 billion dollars to invasive species annually. Though the cost to Africa has not been estimated this is expected to also run into the billions.

Management of invasive species

8. Prevention, early detection, and rapid response against invasive species are required to prevent their introduction and spread. Regional or worldwide approaches to management of invasive species are often ideal because invasive species do not recognize national barriers. Such an approach would involve sharing experiences and collaborating on ideas for the development of programmes and methodologies of control, prevention, monitoring and the management of invasive species. Fortunately, regional and global cooperative efforts to fight invasive species are quite encouraging. Though delayed a continental effort to deal with the problem of invasive species in Africa was instituted about five years ago. The Forest Invasive Species Network for Africa (FISNA) is a network of scientists, administrators and stakeholders in Africa that aim to protect the forest resources of Africa against noxious biotic agents.

Table 1. Some major forest invasive plant species recorded in Africa.

SPECIES	COMMON NAME (S)	FAMILY	LIFE FORM	Country/ Region
Acacia hockii De Willd.	Shitim wood	Leguminosae	Small tree	Uganda
Acacia mearnsii De Wild.	Black wattle	Mimosaceae	Tree	Tanzania, South Africa
Broussonetia papyrifera (L.) Vent.	Paper mulberry	Moraceae	Tree	Ghana, Uganda
Castilla elastica Cerv.	Mexican rubber tree	Moraceae	Small tree	Tanzania
Chromolaeana odorata (L.) King & Robinson	Siam weed	Asteraceae	Shrub	West and Central Africa, South Africa
Cercropia peltata L.	Pumpwood	Cercropiaceae	Tree	Cote d'Ivoire, Cameroun, Dem. Republic of Congo
Cordia alliodora (Ruiz & Pav.) Oken	Spanish elm	Boraginaceae	Tree	Tanzania
Eucalyptus terreticornis Sm.	Forest redgum	Myrtaceae	Tree	Malawi, East Africa
Lantana camara L.	Lantana	Verbenaceae	Shrub	West, Central and East and Southern Africa
Leucaena leucocephala (Lam.,) De Wit	Leuceaena	Mimosaceae	Small tree	Ghana, Kenya, South Africa
Maesopsis eminii Engl.	Umbrella tree	Rhamnaceae	Tree	Tanzania, East Africa
Mimosa pigra L.	Mimosa	Mimosaceae	Small tree	Uganda
Pinus patula	Patula pine	Pinaceae	Tree	Malawi, East Africa, South Africa
Prosopis juliflora (Sw.) DC.	Prosopis	Mimosaceae	Small tree	East Africa South Africa
Rubus ellipticus Smith	Yellow Himalayan raspberry	Rosaceae	Shrub	Tanzania
Senna spectabilis DC.	Cassia	Caesalpinacea e	Small tree	Uganda, Tanzania, East AFrica

Table 2. Some invasive insects and diseases in Africa

Scientific name	Common name	Order: Family	Host plant	Distribution
Aonidiella orientalis	Oriental scale insect	Hemiptera: Diaspididae	*Azadirachta indica*	Cameroon, Chad, Nigeria, Niger
Leptocybe invasa	Blue gum chalcid	Eulophidae (Hymenoptera)	*Eucalyptus* spp.	Kenya, Ethiopia, Tanzania, Zimbabwe, South Africa
Cinara cupressivora	*Cypress aphid*	Hemiptera: Aphidadae	*Cinara cupressivora* (Cypress)	East/ Southern Africa
Sirex noctilio	*Sirex wasp*	Hymenoptera: Siricidae	*Pinus radiata*	South Africa
Thaumastocoris peregrinus	Bronze bug	Hemiptera: Thaumastocoridae	*Eucalyptus* spp.	South Africa, Zimbabwe, Malawi
Phytophthora cinnamomi			*Ocotea bullata*	South Africa
Amillaria spp.			*Tectona grandis Cedrela odorata*	South Africa, Ghana, etc
Phytophthora spp			*Tectona grandis Cedrela odorata*	South Africa, Ghana, etc

The forest invasive species network for Africa

9. The Forest Invasive Species Network for Africa (FISNA) was formed at an FAO sponsored task force meeting in Zomba, Malawi in December 2004 to review and revitalize the defunct Tree Pest Management Network for Africa. The need for an African network on forest invasive species was to ensure that resources and information are freely shared across the continent (Bosu and Chilima 2009). During the meeting the Forestry Research Institute of Malawi (FRIM) was nominated as the Secretariat and an Executive Committee was established of founder members. The overall objective of FISNA is to coordinate the generation, collation and sharing of information relating to forest invasive species in Sub-Saharan Africa for sustainable forest management and conservation of biodiversity. Current FISNA membership includes Benin, Ghana, Kenya, Malawi, South Africa, Tanzania, Togo, Uganda, Zambia and Zimbabwe. FAO, the African Forest Research Network (AFORNET), USDA-Forest Service and Commonwealth Agricultural Bureaux (CAB) International (Africa) have variously provided technical and financial support in the functional role of partners and/or sponsors.

10. In order to pursue its key objective of networking and information sharing FISNA maintains an active website which is currently hosted by FAO www.fao.org/forestry/site/26951/en. In addition, FISNA maintains a dynamic listserver hosted by the University of Pretoria which serves as the forum for discussion and information exchange on issues relating to invasive species on the continent. All FISNA members work on a purely voluntary basis with the support and permission of their institutes. Membership is open to individuals in the forestry sector in sub-Saharan Africa. Experts in forest invasive species and other stakeholders who wish to join or support the network can obtain further information from the FISNA website: www.fao.org/forestry/site/26951/en.

Future outlook

11. In order for FISNA to achieve its objectives the support of policy-makers and administrators of the forest sector in all countries of Africa is needed to succeed in the fight against invasive species.

i. A representation of all or most countries of Africa is important to make the network a truly continental body. This would lead to a better understanding of the current status of forest invasive species in Africa, and the national or regional programmes in place to mitigate their impact.
ii. Relevant policies and logistical support are required in various countries of Africa to regulate entry or exit of biotic agents which are recognized invasive species or have the potential to become invasive . This would include strengthening of monitoring staff and institutions at entry points within countries.
iii. Provision of logistics to undertake rapid response to managing invasive species before spreading.
iv. Fostering cooperation with different stakeholders in agriculture, forestry, wildlife and other relevant institutions on programmes for the prevention and management of invasive species.
v. Provision of support for research for the generation of information and networking for FISNA and other relevant institutions and bodies on the continent.

Conclusions

12. There is no question that the problem associated with invasive species will continue to be with us, even as intra-continental and world-wide trade increase. The cost involved in preventing, monitoring or managing invasive species can be huge and the outcome of the efforts sometimes may appear little or insignificant. However, the social, economic and environmental consequences of our inaction could be catastrophic. Prevention, early detection and rapid response, information sharing and networking are key to managing the problem of invasive species.

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(7) WILDLIFE LEGISLATION AND THE LEGAL EMPOWERMENT OF THE POOR IN SUB-SAHARAN AFRICA

Introduction

1. This paper presents some of the key findings of a series of studies published by FAO on wildlife legislation in different parts of the world in an effort to provide tools for the assessment of the effectiveness of existing legal frameworks and guidance for developing new legislation. Its purpose is to promote participatory and inter-disciplinary legislative drafting, aiming at the conservation and sustainable management of wildlife as well as improvement of food security and rural livelihoods.. Two of these studies – available on the FAO website[2] – cover a total of twenty-seven Sub-Saharan countries. The following briefly presents some of the key findings.

Scope

2. The **scope of wildlife legislation** in any country must be determined in light of the country's international obligations as well as all relevant national legislation (regarding land, environment, protected areas, forestry, etc.), including customary rules. Current environmental and social needs will then further determine the extent to which certain aspects (as for example subsistence hunting, eco-tourism or other economic activities) should be addressed.

An important contribution to the effectiveness of legislation are requirements which ensure the **representation** of various sectors of society in bodies which are called upon to advise or make decisions on wildlife management, both at the central and at the local level. **Public participation and access to justice** – two of the pillars of legal empowerment of the poor – are also key aspects for ensuring the meaningful participation of stakeholders in sustainable wildlife management and should be facilitated through appropriate legislation – for example by devising alternative dispute resolution mechanisms.

Ownership

3. Appropriately addressing **wildlife ownership** and people's rights with respect to wildlife is essential to ensure that benefits which may be derived from conservation and sustainable management of wildlife are accessible to all sectors of society. The analysis made shows that general statements on wildlife ownership are less important than substantive provisions entitling benefits from sustainable wildlife use. The grant of hunting and other management rights to private or communal land owners have often served as a basis for successful private wildlife management initiatives, even where ownership of wildlife has not been transferred to land owners. Wildlife legislation should therefore clearly and securely grant management rights, whether or not in connection with ownership of wildlife.

Management

4. Legislation can also contribute to the **reduction of human-wildlife conflicts.** Provisions addressing "problem animals" should be part of a strategy to address such conflicts, requiring for example the creation of a system to collect data and the involvement of the people concerned in the determination of measures to prevent and, if possible, compensate for damage.

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[2] http://www.fao.org/legal/prs-ol/paper-e.htm.

5. Legal frameworks should also adequately regulate **wildlife management planning.** Rules should at least require surveying some or all wildlife populations and preparing one or more management plans, based on the surveys' findings and regularly updated. The issue of licences and permits for activities concerned by a management plan should be made subject to the plan's contents. A thorough participatory process for the adoption of plans, rather than simply addressing the needs of local communities in the plans, should be required.

6. Participation of the people concerned in **protected area creation and management** and in the setting of conservation measures would also contribute to the prevention and settlement of conflicts regarding possible land uses as well as human-wildlife conflicts.

7. **Community-based wildlife management**, in any forms such as eco-tourism, sustainable hunting, ranching and breeding, is also an aspect to be addressed in legislation. These initiatives are to be encouraged both on community land as well as on state land where appropriate. They should have a clear and secure basis in law and be further specified in agreements between the administration and the communities concerned. Special efforts must be made for the formulation of provisions focusing on the inclusion or representation of all members of the community in these initiatives.

8. **Concessions or other initiatives in which the private sector is involved** also require a legal basis, whether or not taking place on private land. As for community-based initiatives, the law should set out minimum required contents of concessions or private wildlife management contracts, making it compulsory to address duration, respective rights and obligations (including "social" obligations of concessionaires to be identified in consultation with local people, payments due, sharing of benefits, assistance to be provided by the administration) and consequences for the case of violations by either parties or the administration.

9. With specific regard to **ranching and breeding** of wildlife, which may provide a significant contribution to rural livelihoods, legislation should avoid unnecessary rules, while at the same time establish some minimum criteria for environmental and social sustainability.

10. Strengthening **law enforcement** by involving communities or local authorities should also be sought in legislation, for example by allowing local people to require hunters to show their licences or involving them in investigations and offering awards.

11. G**ender issues** may become relevant in wildlife legislation where wildlife use is based upon traditional or customary systems in which women are disadvantaged. The legislation should tend to provide equal access to available opportunities and require equal representation of men and women in relevant multi-stakeholder bodies.

12. Wildlife management legislation could also further contribute to **food security** by enhancing consideration of customary hunting practices – allowing and facilitating them, where sustainable, on the basis of consultative processes.

Conclusions

13. Many of the requirements recommended in this brief presentation already exist in some of the countries of the region, but may need to be strengthened, and need to be introduced in others. The prospect of **harmonizing the legislation of the countries of the region**, possibly by adopting common principles and guidelines, although diversifying the scope and contents of the legislation in every country as appropriate,

remains to be further explored and would be a worthwhile effort towards improved effectiveness of wildlife legislation.

The **Commission** may wish to consider its possible role in such a harmonizing process.

FO:AFWC/2010/5

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10 November 2009

منظمة الأغذية والزراعة للأمم المتحدة | 联合国粮食及农业组织 | Food and Agriculture Organization of the United Nations | Organisation des Nations Unies pour l'alimentation et l'agriculture | Продовольственная и сельскохозяйственная организация Объединенных Наций | Organización de las Naciones Unidas para la Agricultura y la Alimentación

AFRICAN FORESTRY AND WILDLIFE COMMISSION
SEVENTEENTH SESSION

AFRICAN FORESTRY AND WILDLIFE WEEK

BRAZZAVILLE, REPUBLIC OF CONGO
22-26 February 2010
African Forests and Wildlife: Response to the Challenges of Sustainable Livelihood Systems

HEADS OF FORESTRY DIALOGUE
AFRICAN FORESTRY INSTITUTIONS: CAPACITY DEVELOPMENT TO MEET THE CHALLENGES OF A CHANGING WORLD

Background

1. Institutional adaptation is a major issue confronting the forest sector in all countries, especially in the context of the rapid changes taking place in the larger social, economic, and political environment. A number of issues in this regard were outlined during the Heads of Forestry (HOF) Dialogue held during the World Forest Week/19th Session of the Committee on Forestry in March 2009, which acknowledged that public forest institutions are facing many challenges in a changing world.

2. In the African context, these issues include the need for institutional coordination between agencies in charge of forestry and wildlife, central and local administrations, rising awareness of environmental issues, and a new financial architecture. It highlighted the need to identify the institutional and structural factors that are impeding forestry development in Africa and to make recommendations on how reviews of the roles and functions of the institutions can help ease these constraints, leading to measures in support of sustainable capacity building on the continent. Such capacity strengthening is seen as an essential factor for enhancing the contribution of the forest sector to livelihood improvements. While changes are inevitable and unavoidable, there are no standard approaches for institutional adaptation, considering that every change has to be adapted to the specific situation in each country. Yet a lot can be learned through sharing of experiences on how institutions have attempted to change themselves, the outcomes of such efforts, and regional identification of actions and items for further discussion.

Objectives

3. The Heads of Forestry Dialogue within the 17th AFWC is designed specifically to share experiences in bringing about changes in public sector forestry institutions in their attempts to facilitate and contribute to livelihoods improvements. The dialogue's specific objectives are to:

- share information on the major changes facing the forest sector in the countries and how this is being interpreted and embraced by the public sector forestry institutions;
- outline how the functions and structures of public forestry institutions have changed and in what way these have contributed to improving the performance of the sector in general and the livelihoods of forest-dependent people in particular; and
- discuss what may be done to move forward.

Key issues and questions that the Heads of Forestry of the African Forestry and Wildlife Commission member countries may wish to address during the dialogue

4. The following are the broad areas and issues that may be taken up for discussion during the dialogue.

i. *Relevance of public sector forestry agencies:*
- How are public sector forestry agencies remaining relevant in the context of larger changes?

ii. *General changes in public sector institutions*
- How do you compare changes in the public forestry department with that of other closely related government departments?

iii. *Functional changes*
- In defining the tasks, are there any systematic efforts to identify the customers and what their needs are? Are there effective tools and approaches to clearly understand what the customers of forestry expect from the public sector forestry agencies? Are there any specific tasks being identified to contribute to livelihood improvements?

iv. *Structural changes*
- If structural changes are taking place, are they primarily based on changes in the functions or is there a situation where functions remain more or less in tact?

v. *Moving forward*
- From your perspective what is the most ideal framework for your institution?
- What are the constraints/ opportunities you may face in accomplishing your vision?

Programme of the session - Salle de conférence
Wednesday, 24 February 2010

14:00 – 14:10: Introduction ()

14:10 – 14:40: Brief presentations by panellists (5 minutes each)

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14:40 – 15:50: Dialogue on institutional changes (Country representatives providing their views and perceptions reflecting on the questions above)

15:50 – 16:00: Summary of discussion

FO:AFWC/2010/6.1

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4 November 2009

منظمة الأغذية والزراعة للأمم المتحدة | 联合国粮食及农业组织 | Food and Agriculture Organization of the United Nations | Organisation des Nations Unies pour l'alimentation et l'agriculture | Продовольственная и сельскохозяйственная организация Объединенных Наций | Organización de las Naciones Unidas para la Agricultura y la Alimentación

AFRICAN FORESTRY AND WILDLIFE COMMISSION

SEVENTEENTH SESSION

Brazzaville, Republic of Congo, 22-26 February 2009

FAO Forestry and Wildlife Programme in Africa

Report of the Secretariat of the African Forestry and Wildlife Commission on Actions taken on the Requests and Recommendations of the 16th Session of the Commission, Khartoum, Sudan, 18-21 February 2008

Recommendations for the Attention of the Food and Agriculture Organization of the United Nations	Actions Taken
Para xi FAO was invited to form partnerships with environmental organisations in order to apply its knowledge in agriculture, forestry, wildlife and fisheries at the local level.	FAO facilitated inter-sectoral analysis in Zambia involving policy analysts from forestry, agriculture, environment and livestock. This work facilitated inter-sectoral collaboration and policy harmonisation. FAO is working with environmental NGOs to implement the Market Analysis and Development (MAD) approach to improve forest-based income generation for rural communities in Cameroon and Democratic Republic of Congo FAO has formed a partnership with *Centre de coopération internationale en recherche agronomique pour le développement* (CIRAD), International Union for Conservation of Nature(IUCN), World Wide Fund (WWF), International Foundation for the Conservation

Recommendations for the Attention of the Food and Agriculture Organization of the United Nations	Actions Taken
Para xi FAO was invited to form partnerships with environmental organisations in order to apply its knowledge in agriculture, forestry, wildlife and fisheries at the local level (*cont'd*).	of Wildlife (IGF) and Communal Areas Management Programme for Indigenous Resources (CAMPFIRE) to develop a toolkit on Human-Wildlife Conflict (HWC) mitigation, to be used for capacity building, awareness raising and training especially at the local, but also district, province and national levels. FAO in collaboration with *Réseau des Aires Protégées d'Afrique Centrale* (RAPAC) and other partners (African Conservation Foundation (ECOFAC) and the European Community (EC) organized a sub regional workshop on better integration of sustainable livelihoods issues in the management of protected areas. FAO is partnering with SOS Sahel and Farm Africa to promote sustainable land management in Ethiopia. Also with Environment Alert in Uganda on the nfp Facility.
Para. xii The Commission requested FAO to enhance its support to countries in wildlife management and to strengthen the FAO programme on wildlife and protected areas management.	A TCP project proposal has been developed to address human-wildlife conflict in Zimbabwe. In collaboration with the International Council for Game and Wildlife Conservation (CIC), FAO prepared a publication on "Lessons Learnt from Community Based Wildlife Management in Southern Africa, in particular Tanzania", and another study on "Lessons Learnt from Transboundary Conservation Cooperation in Selous-Niassa corridor". FAO prepared and published a legal study on the empowerment of the poor in wildlife management that covers almost all countries in Africa and can be downloaded as FAO Legal Paper online from FAOLEX http://faolex.fao.org/faolex/index.htm. Another legal study on Principles for Sustainable Wildlife Law Development published in hard copy and on-line. In collaboration with CIC published Best Practices in Sustainable Hunting. A sub-regional project proposal on sustainable management of the wildlife and bushmeat sector in Central Africa has been developed and submitted for funding to the Global Environment Facility (GEF) Secretariat. FAO implemented a TCP Facility project on

Recommendations for the Attention of the Food and Agriculture Organization of the United Nations	**Actions Taken**
Para. xii The Commission requested FAO to enhance its support to countries in wildlife management and to strengthen the FAO programme on wildlife and protected areas management (*cont'd).*	human-wildlife conflict in Gabon with emphasis on capacity building, strategy and action plan development.
Para. xiii The Commission welcomed FAO's decentralization process and stressed that there was a continued need for capacity building, education and training in the forestry and wildlife sectors.	FAO has been elected Chair of the board of the Forestry Education Network in Central Africa (RIFFEAC). In collaboration with other partners of the Congo Basin Forest Partnership (CBFP), FAO provided assistance in the development of a sub regional forestry education policy. FAO, in collaboration with the Center for International Forestry Research (CIFOR), provided support to the University of Kisangani (DR of Congo), in the development of a Master's degree programme in sustainable forest management. FAO projects carried out training activities on NWFP management and community-based forest management in Central africa. Work done with Ethiopian Forestry department on assisting in compilation of FRA forms for Global Forest Resources Assessment (FRA) 2010. Proposed internships for Ethiopian and Djibouti foresters in Kenya on FRA FAO implemented a TCP project on Forest Fire Management in Zimbabwe with a strong emphasis on capacity building, awareness raising and training (training manuals were published and widely distributed). Many capacity building activities were undertaken under National Forest Programmes (NFP) Facility partnership at national level, also with training of trainers organized by NFP Facility at sub-regional and regional levels. All countries (Angola, Comoros, Congo, the Gambia, Tanzania and Zambia) supported by FAO in national forest monitoring and assessment (NFMA) and Indigenous Land Use Agreement (ILUA) benefited from a programme of capacity building in forest inventory, mapping using remote sensing techniques, data analysis and information

Recommendations for the Attention of the Food and Agriculture Organization of the United Nations	**Actions Taken**
Para. xiii The Commission welcomed FAO's decentralization process and stressed that there was a continued need for capacity building, education and training in the forestry and wildlife sectors (*cont'd).*	management. FAO organized several capacity building training workshops for local communities (including minorities and pygmies) and traders involved in NWFP value chains in Cameroon and Democratic Republic of Congo. Additionally capacity building on (community-based) forest enterprise development was provided in Mali, The Gambia, Liberia and Burkina Faso. In 2007/2008 FAO implemented a TCP facility to support one of the forestry education project in Zimbabwe. The project titled..."Charting new directions for technical forestry training at the SADC Forest Training Facility in Zimbabwe" aimed at laying the basis for revitalized and viable technical forestry training in Zimbabwe, capable of meeting emerging needs and satisfying the training requirements of students and the forest sector in Zimbabwe and neighboring countries as a whole.
Para. xiv The Commission requested FAO to amend the AFWC Statutes and Rules of Procedures, to include in the first sentence of paragraph one, the words " *and wildlife*". The amended text would read as follows: "The function of the AFWC shall be to advise on forestry *and wildlife* policy... ".	*The Office of the FAO Legal Counsel has been consulted.*
Para xvi The Commissions recommended that FAO assist member countries in their efforts to enhance national and regional capacities for the development, implementation and monitoring of wood energy systems, including the establishment of information systems.	In order to support urban wood energy planning and policy formulation, analytical methods and planning tools aiming at a sound and objective definition of urban/rural interaction were defined for 4 cities (Dar-es-Salaam, Arusha-Moshi, Kampala and Khartoum) in East Africa. The WISDOM methodology was reviewed and adapted to map woodfuel surplus and deficit areas in terms of local supply/demand patterns and to outline the potential sustainable woodfuel supply zones. FAO assisted the Central African Republic with the formulation of a wood energy strategy as part of its national strategy and programme on urban and periurban forestry. WISDOM was applied and a complete national assessment of supply and demand of woody biomass was done. Stakeholders who may be at risk of woodfuel shortages in the near future were

Recommendations for the Attention of the Food and Agriculture Organization of the United Nations	Actions Taken
Para xvi The Commissions recommended that FAO assist member countries in their efforts to enhance national and regional capacities for the development, implementation and monitoring of wood energy systems, including the establishment of information systems (*cont'd).*	identified. This represented a first essential step towards the establishment of the participatory programmes of sustainable wood fuel production and marketing. Capacity building exercises were also undertaken for staff at the Ministry of Water, Forests, Wildlife and Fisheries. FAO is currently working in Rwanda to help to improve knowledge of the supply and the demand of woodfuels in order to better formulate wood energy policies and to establish its strategic programme aiming at the sustainable utilization and monitoring of existing resources. FAO provided assistance to Burundi and Rwanda with Wood Energy Technical Cooperation Programmes. All countries having established national forest monitoring and assessment (NFMA) and ILUA processes have established forest information system, including information on wood energy FAO is currently working in Rwanda to help to improve the knowledge of the supply and the demand of woodfuels in order to better formulate wood energy policies and to establish its strategic programme aiming at the sustainable utilization and monitoring of existing resources.
Para xvii The Commissions recommended that FAO assist member countries in their efforts to implement the voluntary guidelines and to develop national and regional fire management plans.	• TCP projects in Botswana, Zimbabwe and Cape Verde were executed by the sub-regional forestry officers and the Fire Management Officers from HQ. A UTF project in Morocco has entered in its second phase with again a component on fire management. • The FAO Representation in Benin with support from the Fire Management officer at HQ used TCP /Facility funds (TCP/Ben/3101) to develop a participatory assessment of bushfires in Benin and to develop elements of a national strategy on fire management. The results are a potential framework for a future project. • The Voluntary Guidelines have also been widely distributed among stakeholders Working on Fire, the South African responsible vegetation fire agency, and are

Recommendations for the Attention of the Food and Agriculture Organization of the United Nations	Actions Taken
Para xvii The Commissions recommended that FAO assist member countries in their efforts to implement the voluntary guidelines and to develop national and regional fire management plans *(cont'd)*.	being used as an additional tool in their toolbox. • In Botswana the Guidelines were used to develop a national fire policy and strategy, while in Ghana a manual on procedures for Community Based Fire Management has been produced (International Tropical Timber Organization (ITTO)/World Conservation Union (IUCN). • FAO is also heavily involved in the International Liaison Committee which supports the organization of the next International Wildland Fire Conference in South Africa 2011. FAO assisted Chad in the development of a national fire management strategy, commissioned a baseline study on wildfires in Chad and organized a national workshop on wildfires where it presented the voluntary guidelines Work done on fire awareness and training of Ethiopian officers FAO-SFS in collaboration with the South African Development Community (SADC) organized a meeting on wildfires, presented the voluntary guidelines and assisted SADC in the development of a regional fire management strategy and transboundary fire management plans.
Para xviii The Commission requested FAO to increase its efforts to strengthen the capacity of national correspondents and provide them with the necessary support for procuring accurate data of high quality on all types of forests and other land uses.	FAO: Is providing technical and financial support to Angola, Comoros, Congo, the Gambia, Tanzania and Zambia to set up NFMA or ILUA systems, build national capacity and generate new information about all forest types and trees outside forests. Is currently assisting South Africa to design a project for NFMA and capacity building. Provided assistance to Sudan in formulation of project of NFMA. The project was submitted to FAO for approval as UTF (Government funds) plus TCP. The project was approved. Guidelines for the preparation of country reports to the FRA 2010 have been prepared in English, French, Spanish and Arabic and disseminated to the national correspondents.

Recommendations for the Attention of the Food and Agriculture Organization of the United Nations	**Actions Taken**
Para xviii The Commission requested FAO to increase its efforts to strengthen the capacity of national correspondents and provide them with the necessary support for procuring accurate data of high quality on all types of forests and other land uses *(cont'd)*.	Three regional workshops have been held and three regional focal points and a short term consultant have been in regular contact with National Correspondents to provide guidance and advice. A global remote sensing survey of forests has been initiated and several African countries are represented in the country task force which carried out a pilot phase. Pre-processed remote sensing (Landsat) imagery is being made available to all countries and two sub-regional workshops (Central Africa and East Africa) took place in October 2009, organised in collaboration with the EC Joint Research Center and the Observatory for the Forests of Central Africa (FORAF) – key partners in this initiative. A number of externally funded projects on national forest monitoring and assessment have been initiated and € 50,000 have been secured from France to help procure remote sensing imagery to obtain better estimates of forest area change over time.

Regional Issues Identified by the Commission for the Attention of the Committee on Forestry	**Actions Taken**
Para xix The Commission requested FAO to enhance its support to countries in wildlife management and strengthen the FAO programme on wildlife and protected areas management. It further recommended that the terms of reference and mandate of the Working Party on Wildlife Management and Protected Areas (WPWMPA) be revised in order to increase its relevance for the Commission.	Work in progress
Para xx The Commission requested FAO and other members of the Collaborative Partnership on Forests (CPF) to continue and increase their collaboration and cooperation in their forest and climate change programmes. It called upon FAO to organize regional workshops on forests and climate change to share information on recent developments; exchange experiences; facilitate regional and sub-regional cooperation; and, while recognizing variability among them, to develop unified approaches and positions.	FAO-SFE with UNDP organized a biofuel and climate change workshop in April 2009, with 50 participants from Africa and Europe. Publication of presentations. Participation in Ethiopian Society of Animal Production annual conference via presentation on Climate Change in September 2009 FAO collaborated with the African Forest Forum and organized a sub-regional workshop on climate change and forestry for eastern Africa in November 2009 to create awareness and a body of knowledge/expertise on the issue in the sub-region. FAO and AFF are also organizing a pre-session workshop on climate change, forests and wildlife, with the same objectives, in Brazzaville on 20 and 21 February 2010.
Para xxi The Commissions recommended that (i) linkages between forests and water resources be studied further; (ii) integrated management of water and trees be encouraged, including incorporating forestry in watershed management plans; and (iii) innovative mechanisms, including payments for environmental services, be put in place to ensure efficient and sustainable water, trees and forests management.	A study was carried out on "Eucalyptus, impacts on water and economic and environmental aspects". The report was published in March 2009 Eucalyptus in East Africa The Socio-economic and Environmental Issues
Para xxii The Commission took note of the inclusive consultation process launched by FAO for the participatory review of its strategy for forestry, and concurred with the procedure and time schedule presented. It requested FAO to circulate the draft strategy in mid-2008 and to present the new strategy to the 19th Session of COFO in March 2009 for its consideration.	Strategy circulated and comments received. Revised version presented at 19th Committee on Forestry in March 2008 and approved. FAO-SFE prepared with stakeholders in a Forestry Strategy for FAO in Eastern Africa. Implementation is planned to start in 2010.

Regional Issues Identified by the Commission for the Attention of the Committee on Forestry	**Actions Taken**
Para xxiii To further integrate forestry and wildlife activities in the work of the Commission, it requested FAO to amend the AFWC Statutes and Rules of Procedures, to include in the first sentence of paragraph one, the words " *and wildlife*". The amended text would read as follows: "The function of the AFWC shall be to advise on forestry *and wildlife* policy... ".	*The Office of the FAO Legal Counsel has been consulted.*

Appendix E of the 16th AFWC Report: **Recommendations to FAO of the 17th Session of the Working Party on Wildlife Management and Protected Areas**	**Actions Taken**
• Provide support to the efforts of countries to manage HWC through facilitation of networking between stakeholders for information sharing, guidance on best practices, provision of technical guidelines for the development of national policies and implementation of field activities.	Human-Wildlife Conflict (HWC) Toolkit developed in collaboration with CIRAD, IUCN, WWF and CAMPFIRE. Presentation of the FAO HWC work at different international fora (Windhoek, Namibia, Lichinga, Mozambique). FAO has published a Forestry Paper on HWC. TCP proposal on HWC mitigation for Zimbabwe has been developed and the HWC Toolkit tested in Zimbabwe, Zambia, Botswana and Mozambique. FAO also implemented a TCP Facility project on HWC in Gabon with emphasis on capacity building, strategy and action plan development. FAO provided support to RAPAC in the development of HWC sub regional strategy and actions plan.
• Support countries' initiatives for sustainable wildlife management (through nature tourism, tourism hunting, wildlife rearing, trade of wildlife and bushmeat) in order to attain food security and poverty alleviation.	In collaboration with CIC the studies on Community Based Wildlife Management, analysis of recreational hunting pricing and marketing strategies. A sub-regional project proposal on sustainable management of the wildlife and bushmeat sector in Central Africa has been developed and submitted for funding to the GEF Secretariat.
• Recognize wildlife as an integral component of forest biodiversity which has ecological, socio-economic, cultural, scientific importance and which therefore needs to be appropriately addressed in FAO forestry fora and publications and by providing technical assistance to countries through field projects, policy support and other activities.	Recognized in the new FO Strategy for Forestry and by recent FAO publications on wildlife management and legislation. Key support provided by projects and regular programme to the member countries in the area of wildlife management, wildlife policy and legislation (best practices in Sustainable Hunting, Principles for Wildlife Law Development, Human-Wildlife Conflict mitigation, etc.). FAO in collaboration with CIRAD conducted a baseline study on the management of biodiversity, including wildlife, in forest concessions in Central Africa. FAO-RAF's flagship magazine, "*Nature & Faune*", Volume 23, Issues 1 and 2 published in 2008 and 2009 focused on issues of forestry and wildlife to raise awareness on the the need to take wildlife into consideration in forest and other ecosystem management

Appendix E of the 16th AFWC Report: **Recommendations to FAO of the 17th Session of the Working Party on Wildlife Management and Protected Areas**	**Actions Taken**
• Propose a new structure and mandate of the Working Party on Wildlife Management and Protected Areas (WPWMPA) for adoption at the next session of the Commission, including specific Terms of Reference of the bureau; and propose to the AFWC that its Mandate and Statutes be revised to include wildlife issues.	*emailed Rene Czudek and Edgar Kaeslin* *Work in progress*
• Reinforce the wildlife programme for Africa by increasing resources, both human and financial, for example by establishing a position of wildlife officer in the Regional Office.	From mid-2008 the duties of the Forestry Officer in the sub-regional office for Southern Africa were redesigned to cover both forestry and wildlife issues and further strengthen the FAO programme on wildlife and protected areas.

FO:AFWC/2010/6.2

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December 2009

منظمة الأغذية والزراعة للأمم المتحدة | 联合国粮食及农业组织 | Food and Agriculture Organization of the United Nations | Organisation des Nations Unies pour l'alimentation et l'agriculture | Продовольственная и сельскохозяйственная организация Объединенных Наций | Organización de las Naciones Unidas para la Agricultura y la Alimentación

AFRICAN FORESTRY AND WILDLIFE COMMISSION

SEVENTEENTH SESSION

AFRICAN FORESTRY AND WILDLIFE WEEK

BRAZZAVILLE, REPUBLIC OF CONGO
22-26 February 2010

African Forests and Wildlife: Response to the Challenges of Sustainable Livelihood Systems

Forest resources assessment and monitoring

National Forest Monitoring and Assessment (NFMA): capacity development for collecting and reporting timely and reliable data on forest resources, forest and land-use change, forest uses and users to improve national policy and planning needs and country reporting to UN conventions and international processes.

National Forest Monitoring and Assessment

1. National Forest Monitoring and Assessment (NFMA) is the process of collection, analysis and use of information about the entire forest resources in a country. NFMA includes also analysis, evaluations and scenario development for use of information in e.g. policy processes and various other forms of decision-making. National forest inventory is the principal activity of data collection within an NFMA.

2. The demand for forest and land use information has evolved from the decades-old merely economic point of view to, nowadays, a wider range of information encompassing the economic, social and environmental benefits of forest and tree resources. African countries are among the most endowed with forestry resources, but they are also among those with the most scant information. One of the main conclusions of the Global Forest Resources Assessment (FRA) 2000, and later confirmed by FRA 2005, was that the forestry information in Africa is still poor and most countries have difficulties in reporting on their resources: for example in the last two decades only eight countries provided reports with information collected through field surveys

and mapping. All the other countries, including those with the greatest forest cover such as Angola, Democratic Republic of Congo, Gabon, Sudan and Zambia, did not report on national forest inventory processes. The scarcity of forestry information in Africa is the result of a number of factors including:

(i) lack or insufficient financial and human capacity of the countries;

(ii) information and knowledge about the forestry resources are often not among the countries' priorities, and

(iii) low awareness of decision-makers about the national forest inventory process as the foundation for policies, planning and development.

3. The FAO Forestry Department has built up a significant capacity to respond to countries' requests for assistance to NFMA processes. NFMAs are country demand-driven and designed to meet firstly the needs of national decision-makers and then international reporting requirements. Worldwide, since 2000, FAO has assisted nine countries in completing their NFMA projects and is supporting similar projects in ten other countries.

4. In Africa, FAO has responded to all countries that have requested its support: Algeria and Cameroon have completed their NFMA; and Zambia has completed its national integrated land use assessment (ILUA) and is working with FAO on the planning of the Phase II of ILUA. NFMA projects are under way in Angola, Congo and Tanzania. FAO supported Uganda with the formulation of its NFMA project. The project is not yet funded. South Africa is currently planning an ILUA project with FAO.

5. The NFMAs are designed to monitor and report on the reduction of emissions from deforestation and forest degradation (REDD) and be a tool to develop national strategies for poverty reduction and REDD as well as for adaptation to and mitigation of climate change.

Recommendation to the Commission

6. African countries are facing increasing demands for timely and accurate data on their forestry sectors. This data is needed primarily to meet national policy and development needs but also in order to respond to various requests for inputs to the international processes, including REDD, carbon stock and broad climate change issues. There is increasing recognition of the important role of forests in climate change mitigation. Consequently, international funding opportunities for NFMA and Monitoring, Reporting and Verification (MRV) are also increasing, either through the UN REDD programme, the Forest Carbon Partnership Facility of the World Bank or through other bilateral initiatives. The AFWC countries may therefore consider it beneficial to make use of these funding opportunities as well as FAO's comparative advantage within a holistic approach to national and regional capacity building and institutional strengthening of forest resources monitoring and assessment, based on the principle of policy reform for sustainable socio-economic and development.

FO:AFWC/2010/6.3

19 November 2009

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منظمة الأغذية والزراعة للأمم المتحدة | 联合国粮食及农业组织 | Food and Agriculture Organization of the United Nations | Organisation des Nations Unies pour l'alimentation et l'agriculture | Продовольственная и сельскохозяйственная организация Объединенных Наций | Organización de las Naciones Unidas para la Agricultura y la Alimentación

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PREPARATION OF
THE STATE OF THE WORLD'S FOREST GENETIC RESOURCES

1. Genetic diversity provides the fundamental basis for the evolution of forest tree species and for their adaptation to change. Conserving forest genetic resources is therefore vital, as they are a unique and irreplaceable resource for the future. FAO has for many decades acknowledged their importance. As far back as 1967, the FAO Conference recognized that forest genetic diversity was increasingly being lost and requested the establishment of the Panel of Experts on Forest Gene Resources, to help plan and coordinate FAO's efforts to manage the genetic resources of forest trees.

2. FAO's activities in forest genetic resources are an integral part of the FAO Forestry Programme and contribute to other programme components, such as sustainable forest management, tree breeding and plantation development, and protected area management. For many decades, the Panel of Experts on Forest Gene Resources has guided FAO's work on forest genetic resources, reporting on progress made to the Committee on Forestry (COFO).

3. Forest genetic resources management can be effective only if treated as an integral element of overall sustainable forest management. Conservation concerns should be integrated into broader national and local development programmes, such as national forest programmes, rural development plans and poverty reduction strategies, which promote cooperation among sectors.

4. However, lack of information limits the capacity of countries and the international community to integrate forest genetic resources management into overall cross-cutting policies. It is recognized that reliable general data on forest status and trends is of great importance to the efficient management of forest genetic resources. Forest-related information, however, largely refers to forest resources in general rather than to forest diversity and variation. Availability of specific information on status and trends in forest genetic resources is today woefully inadequate, although some progress has been made at the national and sub-regional levels in the past decade.

5. At its Eleventh Session in June 2007, the Commission on Genetic Resources for Food and Agriculture (CGRFA) acknowledged the urgency to conserve and sustainably utilize forest genetic resources. The Commission requested that a *State of the World's Forest Genetic Resources* report be prepared and presented to the Commission in 2013. The CGRFA recommended that the Committee on Forestry and the FAO Regional Forestry Commissions be involved in the preparation of the report, in synergy with relevant regional and global programmes, including the Convention on Biological Diversity.

6. The report on the *State of the World's Forest Genetic Resources* will be prepared through a country-driven approach based on information provided by countries and thematic studies. The Global Forest Resources Assessment process (FRA) might serve as a model, and the two processes will be linked.

7. The process would build upon relevant initiatives and experience, including seven sub-regional workshops organized by FAO over the past ten years, for which 71 national reports were prepared, and the global FAO Information System on Forest Genetic Resources (REFORGEN) database based on information provided by member countries.

8. The preparation of the *State of the World's Forest Genetic Resources* was welcomed by the ninth meeting of the Conference of the Parties (COP 9) of the Convention on Biological Diversity (CBD) in May 2008.

9. All FAO Regional Forestry Commissions, held between February and October 2008, were informed of the plan to prepare *The State of the World's Forest Genetic Resources*.

10. FAO has built awareness about the plan to prepare *The State of the World's Forest Genetic Resources* with its main international and regional technical partners on forest

genetic resources and gathered inputs from these partners to support the preparation of the analysis of key issues for preparation of *The State of the World's Forest Genetic Resources*. Consultations were organised in collaboration with international partners, in particular Bioversity International and the World Agroforestry Centre (ICRAF), regional networks and national partners:

- Africa: two sub-regional workshops were organised in collaboration with Bioversity International, ICRAF, the Sub-Saharan Africa Forest Genetic Resources Programme (SAFORGEN). A consultation for Eastern and Southern Africa was held in Nairobi, Kenya (January 2009), and another one for Central and Western Africa was conducted in Ouagadougou, Burkina Faso (February 2009).

- Latin America: a regional discussion took place during a meeting of the Latin American Forest Genetic Resources Programme (LAFORGEN). The meeting was organised by Bioversity International, with the support of Spain, in the Agronomic Tropical Center for Research and Training (CATIE), Costa Rica (September 2008).

- Asia-Pacific: a regional workshop was organised in Kuala Lumpur, Malaysia, October 2008, in collaboration with the Asia-Pacific Association of Forest Research Institutions (APAFRI), Asia-Pacific Forest Genetic Resources Programme (APFORGEN), Bioversity International and the Forestry Research Institute of Malaysia (FRIM).

11. At its Nineteenth Session (March 2009), the Committee on Forestry discussed and supported the preparation of *The State of the World's Forest Genetic Resources*, urging member countries to collaborate with FAO and partner organizations in producing the Report, and requesting a specific reference to forest genetic resources in the FAO Forestry Strategy.

12. At its Twelfth Session (October 2009) the CGRFA Commission requested FAO to prepare *The State of the World's Forest Genetic Resources* for consideration at its Fourteenth Regular Session. It stressed that the process for preparing report should be based primarily on Country Reports, with support through the proposed thematic studies and reports from international organizations, as well as inputs from relevant stakeholders. The Commission endorsed the proposed outline and tentative list of thematic studies contained in Annexes 1 and 2. It also agreed on the indicative timeline provided in Annex 3.

13. The primary source of data and information for the preparation of *The State of the World's Forest Genetic Resources* will be Country Reports on Forest Genetic Resources. The Country Report preparatory process will focus on the review of existing data and information and the identification of gaps and needs. Detailed guidelines for Country Reports are being prepared to assist countries to prepare for their Country Reports, as strategic assessments of the status and trends of forest genetic resources, as well as the state of management capacities and needs. In this way, Country Reports will both serve as strategic tool for national efforts to enhance the use, development and conservation of forest genetic resources, as well as provide the basis for preparing the global report on

The State of the World's Forest Genetic Resources. FAO will emphasize the importance of preparing the Country Report as a national strategic tool for forest genetic resources, and the need to establish national mechanisms to ensure opportunities for the participation of national stakeholders in the preparation of the Country Report. Countries will be encouraged to hold national workshops and/or other means for consultations with indigenous and local communities and stakeholders in elaborating their Country Reports.

14. FAO will formally request the preparation of Country Reports and the establishment of a National Focal Point on forest genetic resources to serve as the main contact point for FAO during the preparatory process. Subject to the availability of extra-budgetary resources, limited financial assistance will be made available to support developing countries to prepare their Country Reports, including to assist them to conduct workshops and consultations. In addition, FAO and partners will, upon request, provide technical assistance for the preparation of the Country Report. Regional meetings will be held to review Country Reports and discuss common issues, if financial resources are available.

Annex 1: *The State of the World's Forest Genetic Resources* - Outline by chapter

	Chapter Title	*Scope of Chapter*	*Issues and elements*
1	**Overview of Forest Genetic Resources (FGR)**	Definition of FGR - their value and importance – Between and within species diversity - Threats, opportunities and challenges	Characteristics of FGR, differences and similarities between trees and other organisms – Context of FGR management - Main forest management systems (including agroforestry systems) – Concept of Sustainable Forest Management (SFM) - Economic, environmental, social and cultural values of FGR – Role of forest genetic diversity in ecosystem resistance, resilience, and vulnerability - Threats and risk status – causes of genetic erosion
2	**The State of Forest Genetic Resources Management**	FGR conservation and management – Strategies - Programmes - Implementation	Characterisation of genetic diversity - Conservation *in situ* and *ex situ*, genetic improvement programmes and their implementation – Delivery/deployment systems – Role of public and private sectors – Social and economic value of conservation and breeding activities
3	**Trends Affecting the Forest Sector and their Implications on Forest Genetic Resources**	Assessment of impact of global trends in FGR and their management	Internal and external drivers – Environmental, economic, social, political trends and outlook - Positive and negative implications - Threats and opportunities
4	**The State of Capacities**	Capacities of stakeholders and institutions involved in FGR management and conservation	Infrastructures, institutional and human capacities – Public and private sectors, including at local level – Capacities in: development and implementation of FGR conservation and management strategies, tree genetic improvement, information sharing and networking, mainstreaming FGR management into forest management and broader international, regional and national policies and programmes – Training capacity
5	**Institutional and Policy Framework**	Institutional, policy and legal framework for FGR management at national, regional and global level	Institutions responsible for FGR management, including coordination mechanisms – Legal framework and traditional use rights in FGR management - FGR in national forest programmes and other national strategies and policies (poverty reduction, biodiversity, land degradation and desertification, climate change, etc) – International and regional agreements/treaties – Frameworks for transfer of forest reproductive material
6	**Status of Knowledge – Current and Emerging Technologies**	Current knowledge and gaps in characterisation and improvement – Current and emerging methodologies and technologies	Characterisation – Technologies for conservation – Marker-assisted selection – Propagation and dissemination technology and methods - Participatory tree domestication – Applications of biotechnologies – Challenge of combining biotechnology tools and traditional tree improvement
7	**Needs, Challenges and Required Responses for the Future**	Synthesis and recommendation for action	Syntheses of needs and challenges identified in previous chapters – Priorities for future action

Annex 2: *The State of the World's Forest Genetic Resources* - indicative list of thematic background studies

	Subject	*Rationale*	*Scope*
1	**Indicators of forest genetic diversity, erosion and vulnerability**	Lack of indicators at global and national levels that are scientifically sound, realistic and policy relevant, for defining baseline and for monitoring	Review of existing knowledge, experience and efforts to suggest the way forward to develop appropriate indicators
2	**Understanding genetic diversity of tropical species in natural forests**	Knowledge on life-history traits and genetic diversity is lacking or inadequate for most species to define and implement conservation strategies	Review and syntheses of available knowledge and experience. Proposal of research programmes to improve knowledge on genetic diversity of priority species.
3	**New technologies to support conservation of FGR**	Many forest species are difficult to conserve *in situ* and/or *ex situ*, because of their biological characteristics (*i.a.* recalcitrant-intermediate seeds) and management context	Review of knowledge and experience. Assessment of technologies available and their effectiveness for conservation *in situ* and *ex situ* of genetic resources of priority species, and suggest the way forward
4	**Use and transfer of FGR**	Transfer and exchange are regulated under international agreements, which, in some cases, can result in constraints for programmes to improve knowledge on, and to develop FGR	Review of legal and phytosanitary frameworks, schemes for the transfer of reproductive material, their implementation and impact on transfer of FGR. Recommendations to facilitate safe movement of FGR
5	**FGR role in adaptation to biotic and abiotic factors, with a focus on climate change**	The role of FGR is generally acknowledged, but needs to be better characterised	FGR and vulnerability of species to biotic and abiotic events and process. Resilience and resistance. FGR in mitigation and adaptation to climate change
6	**FGR in relation to bio-energy**	Development of bio-energies brings to FGR management both threats and opportunities, which need to be reviewed and assessed	With focus on FGR, different types of bio-energy – current situation and opportunities offered by new technologies. Use/improvement of new species. Role of private sector; public-private partnerships
7	**Use of FGR in decentralised development for poverty alleviation and livelihood improvement**	Decentralised/local management of forest resources is gaining importance, involving new approaches and technologies in management of FGR. The experience gained in this new area is useful to synthesise	Experience and results in local, participatory conservation and improvement of species for different uses. Analyses of successes and failures. Role and capacity of stakeholders (public and private sectors, communities, etc). Identification of needs and gaps.

8	**Biotechnologies**	Biotechnologies are a quickly evolving field. Their application and potential contribution to FGR conservation and management should be regularly reviewed/updated.	Review of current and future developments and trends in biotechnologies and their application to conservation, management and improvement of FGR (include, but not limited to genetic engineering – threats and opportunities)
9	**Effects of silvicultural practices on genetic diversity**	It is generally acknowledged that silvicultural practices influence the genetic structure of the species. Knowledge available on some species and silvicultural systems should be synthesised and efforts expanded to cover a broader array of key species and situations.	Review and synthesise available experience and knowledge. Identification of gaps. Proposals for action concerning key species and management systems.
10	**Use of native species**	There is a renewed interest for the use of native species in *i.a.* ecosystem and landscape restoration, agroforestry systems and spatial combination with high yielding planted forests for maintenance of overall biodiversity. The experience gained is useful to review and synthesise for further development.	Review and syntheses of experience and results. Analysis of successes and failures in the different systems. Definition of best practices. Identification of needs and gaps.
11	**History of use and management of forest resources and impact on FGR**	There are many cases, where geographical distribution and genetic patterns of forest species were influenced by human activities and policies, which are interesting to present to illustrate the historical dimension of FGR management (contribution to Chapter 1).	Case studies on *i.a.* human pressures on Mediteranean forests and their impact on FGR, African agroforestry parklands, *Pinus pinea*, etc.
12	**Trends in management of FGR by the private/corporate sector**	The role of the private sector (from local communities and smallholders to corporate companies) in management of FGR is increasing. Current and potential impact of this trend should be analysed to define actions needed.	Corporate priorities and policies and their consequences: *i.a.* short term vs. long term, productivity vs. diversity, short life span, volatility of corporate investment and potential threats due to discontinuity. Management of FGR by local communities. Capacity. Role of public sector. Recommendations.

Annex 3: *The State of the World's Forest Genetic Resources* Indicative timetable for the preparatory process

2010

- Invitation of countries to nominate national focal points for the preparation of country reports for *The State of the World's Forest Genetic Resources*. Initiation of preparation of country reports through national focal points.
- FAO to assist countries to prepare their country reports, in collaboration with regional networks, including through global and regional workshops for national focal points.
- Strengthening and further development of the FAO global information system on forest genetic resources (REFORGEN).
- Preparation of thematic studies.
- Request to international organizations to submit reports on their activities, data and possible areas of cooperation in relation to *The State of the World's Forest Genetic Resources*.
- Intergovernmental Technical Working Group on Forest Genetic Resources (if established): Review progress in preparation of *The State of the World's Forest Genetic Resources*.
- Committee on Forestry (COFO): Review progress in the preparation of *The State of the World's Forest Genetic Resources*.

2011 / CGRFA-13

- Review progress in preparation of *The State of the World's Forest Genetic Resources*.

2012

- Compilation and analysis of country reports, thematic studies and reports from international organizations.
- Preparation of the draft of *The State of the World's Forest Genetic Resources*.
- Committee on Forestry (COFO): consider progress in the preparation of *The State of the World's Forest Genetic Resources*.

2013

- Intergovernmental Technical Working Group on Forest Genetic Resources:
    - Review the Draft *The State of the World's Forest Genetic Resources*.
    - Review possible follow-up to *The State of the World's Forest Genetic Resources*.

2013 / CGRFA-14 PRESENTATION OF *THE STATE OF THE WORLD'S FOREST GENETIC RESOURCES*

- Consider follow-up to *The State of the World's Forest Genetic Resources*, including holding regional consultations to identify priority areas for action.

2014

- Presentation of *The State of the World's Forest Genetic Resources* to COFO, the United Nations Forum on Forests (UNFF) and the Conference of the Parties (COP) to the Convention on Biological Diversity (CBD).

FO:AFWC/2010/6.4

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November 2009

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AFRICAN FORESTRY AND WILDLIFE COMMISSION

SEVENTEENTH SESSION

AFRICAN FORESTRY AND WILDLIFE WEEK

BRAZZAVILLE, REPUBLIC OF CONGO
22-26 February 2010

African Forests and Wildlife: Response to the Challenges of Sustainable Livelihood Systems

National forest programmes: a platform for forestry development in Africa

1. The practice of forestry has evolved considerably in the past 20-30 years. However, arguably, the greatest changes have not been in technology or science, but in what societies now expect from forestry. Better linkage of forests with society and greater integration of forests and forestry into the broader development agenda are seen as the key parts of a strategy for safeguarding forests and their future sustainable management.

2. One important approach for linking forests and society is through the participation of stakeholders in forest policy development and implementation. A second approach, related to participation, is to work actively with the sectors whose activities most affect forests in order to develop joint and coordinated policies on forest-related aspects. The efforts to do so and to develop better national forest policies need to match the specific country needs and contexts.

3. All of the above elements are underlying principles of "national forest programme"(nfp) processes, the overarching intention of which is to create and then maintain a flexible but long-term platform for the overall coordination of forest policy development and better strategic planning in countries. Internationally, this effort by countries is supported by many organisations and donors, such as FAO through its

Technical Cooperation Programme (TCP) and through initiatives such as the National Forest Programme Facility ("Facility"), which is a multi-donor initiative hosted by FAO in Rome. The Facility has been operational since 2002 and supports stakeholder participation through the award of small grants in some 75 countries, half of which are in Africa.

4. Today, a functioning overarching platform for forest-related policies and strategies is increasingly important and urgent with the multiplicity of initiatives and projects emerging in the context of climate change and the efforts to reduce deforestation and forest degradation (REDD). The institutions and procedures set up under the nfp-platform as co-ordination mechanisms will be useful in the national efforts to undertake REDD-related consultation and coordination with other policies and stakeholders.

5. It is important that countries make use of these already established nfp-platforms as much as possible to address REDD initiatives. The advantage of an established nfp-platform for overall coordination can be put to full use if countries turn to it for consultation and coordination for all major forest-related policy issues – and do this over a longer period of time. The issues covered often extend to sectors beyond forestry, such as agriculture, energy, infrastructure, and overall economic development, to initiatives such as Forest Law Enforcement, Governance and Trade (FLEGT) , and to more traditional forest management aspects (for example data needs related to forests, forest conservation, sector outlook and strategy development). FAO is currently engaged in a number of countries, including in Africa, to support forestry departments' efforts to forge closer ties with these sectors.

6. In practice, on the coordination of initiatives is mainly in the hands of the individual country to decide on and then develop its own nfp into a flexible longer-term coordination platform that is capable of addressing all forest-related issues. Since less than a decade has passed since countries started to develop and use nfps, REDD and other initiatives are an important testing ground for further developing arrangements so that nfps can fulfil their major intended role, which is to accommodate interests, needs and initiatives from other sectors and thereby, ultimately, better serve the society as a whole. To be able to do so will be crucial for the future of forests and the sustained provision of all the benefits these forests offer to society.

FO:AFWC/2010/6.5

November 2009

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African Forests and Wildlife: Response to the Challenges of Sustainable Livelihood Systems

Regional and country projects

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1. ARID ZONE FORESTS AND FORESTRY IN SUB-SAHARAN AFRICA: ISSUES, CHALLENGES AND RECOMMENDATIONS FOR ACTION

INTRODUCTION

1. Forests in the arid zones[1] of sub-Saharan Africa are an extremely important but undervalued resource. They have significant roles in biodiversity conservation, providing habitat and essential ecosystem goods (such as fodder for livestock, fuel wood, wood, medicines and herbs, tradeable goods such as resins and gums) as well as services (such as soil stabilization, water, erosion and desertification control). Their role in climate change mitigation and adaptation is also important as the sustained provision of these ecosystems' goods and services will help people to adapt to hardship under a changing climate.

2. However, despite their value, these forests are caught in a spiral of deforestation, fragmentation, degradation and desertification. These dynamics are driven by interrelated factors, including climate change, policy and socio-economic factors. Also contributing to the scenario are technical aspects as well as a general lack of understanding of the importance and vulnerability of these systems and, consequently, a lack of investment in their protection, sustainable management and restoration.

ISSUES AND CHALLENGES FACING FORESTS AND FORESTRY IN SUB-SAHARAN AFRICA

3. Forests in the dry lands of sub-Saharan Africa, especially unmanaged forests, are being heavily used to cater for many pressing needs, including conversion to agriculture. In the sub-region of the Economic Community of West African States (ECOWAS), the FAO Forest Resources Assessment has established that 750 000 hectares of forests and woodlands are lost yearly. Forest loss and degradation are driven by a number of inter-related and complex factors, including the following[2]:

i. **DEMOGRAPHIC INCREASE AND GROWING NEEDS FOR RESOURCES:** population increase and high rates of urbanization in the region create heavy demands on forests, putting pressure on the physical integrity, richness, biological diversity and productivity of lands and forests.

ii. **ENCROACHMENT OF AGRICULTURAL FRONTIERS INTO FOREST LANDS:** rain-fed agriculture is dominant in sub-Saharan Africa and supports rural livelihoods. Unreliable rains and long dry spells negatively affect crop production. Shortened fallow periods and demand for additional land for subsistence therefore exert greater pressure on forests and woodlands, causing their degradation and deforestation.

iii. **INADEQUATE TECHNICAL KNOWLEDGE AND CAPACITY:** the knowledge and expertise to assess, inventory and monitor forest and tree resources systematically is generally inadequate in sub-Saharan Africa.. Technical challenges are related in large part to the need for more research on dryland forests and their conservation measures as well the means of improving integrated approaches to address the management of dryland forest ecosystems.

iv. **CLIMATE CHANGE:** According to the Intergovernmental Panel on Climate Change (IPCC), global warming will cause a decrease in rainfall and an increase in extreme weather conditions such as long periods of drought (with few exceptions) in the drylands

[1] ARID ZONES OR ARID LANDS ARE DEFINED AS ARID, SEMI-ARID AND DRY SUB-HUMID AREAS

[2] FAO DRAFT PAPER, 2009 (PREPARED BY EL HADJI SENE), 2009. GUIDELINES ON SUSTAINABLE FOREST MANAGEMENT PRACTICES IN DRY LANDS OF SUB-SAHARAN AFRICA.

of sub-Saharan Africa. Severe water scarcity and increased desertification are likely, thus causing a vicious circle of forest and land degradation.

PRIORITIES AND RECOMMENDATIONS

4. The following main recommendations draw on the priority issues and challenges mentioned above.

(A) ADDRESSING CLIMATE CHANGE – IMPORTANCE OF ADAPTATION AND MITIGATION

5. In-depth assessment and monitoring of the sub-Saharan drylands' forest ecosystems and their vulnerability to climate change needs to be undertaken. Furthermore, there is a need to develop and promote forest adaptation options and guidelines for the region, including the sale of non wood forest products (NWFP) and cattle products to enhance the adaptation capacities of the human populations.

6. To date much of the focus of REDD (reducing emissions from deforestation and forest degradation) discussions has been on large areas of moist tropical forests which are subject to or at risk of deforestation and forest degradation. Yet, dryland ecosystems which harbour an estimated 743 gigatonnes of carbon (essentially in soils)[3] could be better protected to secure this valuable stock of carbon and to prevent its release into the atmosphere. Much *tree planting* has been undertaken in arid zones of the sub-Sahara. For afforestation and reforestation measures to be effective in terms of mitigating climate change, they need to be based on a *LANDSCAPE APPROACH*, taking into consideration all relevant physical, social and environmental aspects.[4]

(B) AN INTEGRATED APPROACH FOR FORESTRY BEYOND THE FOREST BOUNDARIES

7. Forestry needs to be a part of comprehensive and sustainable land use planning and management. There is an urgent and clear need for the forestry sector to work with other relevant sectors in improving and designing appropriate policies as well as putting in place appropriate mechanisms that would provide:

i. clear governance models for sustainable use of forest land and resources as well as incentives and clear benefits for local communities;

ii. access by local communities and small forest- and nature-based enterprises to local, national and international markets;

iii. guidance on roles, responsibilities and the rules of engagement between national institutions, municipalities, other sectors and end users;

iv. guidance and standards for sustainable management of forests at a landscape level; and

v. capacity building opportunities for effective sustainable management of forests and their restoration

(c) Improving and adapting the technical capacity of practitioners

8. The capacity of foresters at all levels needs to be enhanced to address the range of issues involved in dryland forests, notably restoration, climate change and socio-economic aspects. Equally, decision-makers need to better understand the issues at stake, such as livelihood issues as well as the long-term sustainability aspects of valuing natural resources, combating desertification

[3] TRUMPER ET AL 2008

[4] MANSOURIAN ET AL 2009

and loss of biodiversity in drylands. Capacity building strategies and programmes need to be developed and promoted in close collaboration with forest education and research organizations and networks and based on an assessment of the current and future needs of different target groups, linking and networking among places where best practices can be found and experiences exchanged. Capacity building programmes should also target other stakeholders and forest users such as pastoralists, rural development agents, farmers, herders, non-governmental organizations (NGOs) active in rural development projects and initiatives.

(D) DEVELOPING SUSTAINABLE MARKETS OF SUB-SAHARAN FOREST PRODUCTS FOR THE BENEFIT OF LOCAL PEOPLE

9. Various unique goods such as gums, resins, medicinal plants and oils, come from dryland forests of the sub-Sahara and could be an important source of income for poor people in these areas. However, without a supportive trade regime, this is not feasible. *Access to markets* for the sale of locally-produced goods is often a problem, with poor rural people unable and incapable of tapping potentially valuable markets. There's a need to support the development of markets analyses and strategies for sub-Saharan forest products that have the potential to provide multiple benefits for local communities. In addition, priority is to be given to strengthening the capacity of local producers of forest products, processors and traders to ensure sustainable harvesting and management of forest resources while increasing the quality and added-value of the derived products.

TOWARDS IMPLEMENTATION OF THE RECOMMENDATIONS:

BUILDING ON ONGOING COOPERATION AND INITIATIVES IN SUB-SAHARAN AFRICA

10. A growing number of organizations and initiatives are working together, putting in place a solid foundation for the effective implementation of the above-mentioned recommendations. Included among these are the following

i. FAO has already initiated, in collaboration with forestry departments and relevant stakeholders, the development of guidelines on sustainable forest management practices in dry lands of sub-Saharan Africa. The objective is to improve planning and management of the forests in dry lands of the region while contributing to the well being of local people.

ii. The Network for Natural Gums and Resins in Africa (NGARA) was established in May 2000 to assist African producer countries and partners in formulating a co-ordinated strategy for the sustainable development of their natural gums and resin resources. NGARA (WWW.NAGARA.ORG) is bringing together 15 member countries including farmers, collectors, traders, governments, research, NGOs, exporters and importers. The Kenya Forestry Research Institute (KEFRI) in Nairobi is hosting the NGARA secretariat. FAO has provided substantial support to NGARA since its establishment mainly through the the "*Acacia Operation Project – Support to food security, poverty alleviation and control of soil degradation in the Gums and Resins producing countries"* funded by the Italian Government and active in its first pilot phase in 6 countries (Burkina Faso, Chad, Niger, Senegal, Kenya and Sudan).

iii. The Great Green Wall for the Sahara and Sahel Initiative (GGWSSI) emerged as a high-level political and direct response to desertification affecting the Sahara and Sahel countries as well as a means of addressing the related root causes, including poverty and climate change. FAO is collaborating with the countries of the Sahara and Sahel, the African Union Commission as well as with the Community of Sahel-Saharian States

(CEN-SAD) and other regional specialised organisations to support the implementation of the GGWSSI.

CONCLUSION

11. Forests in the arid zones of sub-Saharan Africa are extremely important because of their multiple roles: they are centres of rich and adapted biodiversity and a major source of goods and services in extreme ecological conditions; a buffer against drought and desertification and a safety net against poverty. Nevertheless, they are under threat of degradation and desertification, and being affected by increasing human pressure which is exacerbated by climate change.

12. Urgent action needs to be taken to improve the protection of these forest areas and to secure their sustainable management and restoration, while enhancing their resilience and adaptation to changing climate and human impacts. This will be possible only if the value of these fragile ecosystems is recognized, more human and financial resources are invested in forestry activities at the local level and on a bigger scale and collaborative mechanisms involving different stakeholders are set up and made operational. If such an approach is not followed, these forests and the related goods and vital services they provide will be lost for ever, putting at risk the livelihoods of millions of people in the region. However, collaborative intent and initiatives do exist and can be taken as great opportunities to build upon.

RECOMMENDATIONS TO THE COMMISSION

- The Commission may wish to consider promoting the implementation of the "*Guidelines on sustainable forest management practices in dry lands of Sub-Saharan Africa"*.

2. THE FORESTRY-WATER NEXUS IN AFRICA: *FOUTA DJALLON* AND OTHER KEY WATER RESOURCES CONTRIBUTING TO SUSTAINABLE LIVELIHOOD SUPPORT ON THE CONTINENT

1. The Fouta Djallon Highlands (FDH) are concentrated in the central part of the Republic of Guinea, but extends also into Guinea-Bissau, Mali, Senegal and Sierra Leone. The FDH are the origin of several major international rivers, notably the Gambia, the Niger and the Senegal, as well as a number of smaller water-courses.

2. Due to their geographic and climatic diversity these Highlands and surrounding foothills support dense rural populations as well as a rich diversity of eco-systems. However over the last four decades, growing land degradation, accelerated soil erosion, unsustainable land use and widespread poverty have combined to take their toll on the Highland's forest and wildlife resources, contributing to declines in their value not only as a source of water, but equally in economic biodiversity and the bio-productive potential of the environment. The underlying causes are numerous and diverse, but include population pressure, poor or ineffective policies, and weak institutions.

3. The need for a more collaborative approach amongst those countries relying upon the resources of the FDH was already recognised in 1959, and following the critical Sahelian drought of the 1960s a concerted action was agreed upon, with the then Organization of African Unity (now African Union) establishing in 1981, with the assistance of FAO and other international agencies, a broad-based regional Management Programme for the FDH, involving the eight governments most directly concerned. The long-term goal of this Programme is to guarantee the protection and rational use of the natural resources in the FDH in order to contribute to improve the livelihoods of the local populations.

4. Whilst many national programmes, often supported by external partners, already provide inputs towards the realisation of the overall long-term Management Programme, there remained a need to strengthen the work being done, particularly at the sub-regional level. Thus the governments concerned in collaboration with the African Union and UNEP presented a request to the Global Environment Facility (GEF) for assistance to formulate a major 10-year project to reinforce their ongoing work. A PDF-A and a "PDF-B" were granted in 2000 and 2001 to:

i. organize a consultation of main stakeholders;

ii. prepare an appropriate institutional and legal framework for enhancing the sub-regional (international) character of the overall Regional Management Programme;

iii. facilitate consultation among member states in the design and identification of funding for component activities;

iv. conduct the initial preparation and progressive consolidation of a Transboundary Diagnostic Analysis required for formulation of a consequent overall Strategic Action Plan; and

v. formulate a main-phase project to implement the Strategic Action Plan and its Integrated Development Plan.

5. Considerable work on these aspects was undertaken. Despite a number of hurdles encountered, the basis for the 10-year main-phase project was developed in collaboration with all the principal stakeholders, agreed by UNEP, and finally endorsed by GEF in October 2008.The first 4-year tranche of this main project became operational on 1 July 2009, under the title "Fouta Djallon Highlands Integrated Natural Resources Management Project".

6. The project's development **objective** is to ensure the conservation and sustainable management of the forest, wildlife and water resources of the *FOUTA DJALLON* Highlands, in order to improve the rural livelihoods of the populations in the area. Its specific environmental objective is to mitigate the causes and negative impacts of land degradation on the structural and functional integrity of the ecosystems of the FDH.

7. Based at the International Bureau of Coordination (for the African Union's overall FDH Management Programme) in Conakry, Guinea, the project is serviced by the International Coordination Office (IBC-AU) and the Chief Technical Adviser (FAO), plus eight national Focal Point Officers based in the member countries. A Steering Committee provides the overall policy and coordination role, supported by a Scientific and Technical Committee, which are both due to meet in November 2009.

8. In brief, the implementation of the project's main components has now begun, involving:

- the establishment of a regional legal and institutional framework and strengthening institutional capacity to facilitate regional collaboration;
- the assessment of the natural resources in the FDH, and the ongoing monitoring of their status, facilitated through the establishment of a regional "*Observatoire du Fouta Djallon*";
- the development in some 29 pilot sites, of replicable, community-based sustainable land-management models, where alternative-income generation activities, combined with the training of local community institutions and organisations in natural resources management will be developed and perfected.

9. It is planned that the experience and results achieved should be widely disseminated for use not only within the eight member countries, but throughout the entire African region, using electronic media. Further information can be obtained from:

- unafrik@sotelgui.net.gn
- from the International Coordinator: MMDOUATTARA@YAHOO.COM or
- from FAO and its Lead Technical Officer: THOMAS.HOFER@FAO.ORG.

RECOMMENDATION TO THE COMMISSION

10. The Commission may wish to consider emulating the *FOUTA DJALLON* form of cooperation for the integrated management of shared or transboundary water basins.

3. JOINT PROGRAMME ON STRENGTHENING CULTURAL AND CREATIVE INDUSTRIES AND INCLUSIVE POLICIES IN MOZAMBIQUE: ONE UN APPROACH

1. Although traditional knowledge and the communities which preserve it are critical for sustainable development, they are often overlooked in development plans and interventions. Local communities have knowledge of the use of local resources in a determined area and a profound understanding of the different habitats and eco-systems, which is indispensable to their conservation. At the same time traditional knowledge needs to be safeguarded, and the protection of sacred and/or secret content of the communities ensured. Languages, besides being tools of communication, are the basis for systems of perception and thought, mirrors of cultural identity and vectors of its fundamental values. They are essential elements of the self-consciousness and identity of individuals and societies, and are the basis for the creation, processing and transmission of knowledge. Thus issues such as marginalization or integration, exclusion or empowerment, poverty or development are, to a certain extent, determined by linguistic choices and strategies. Mozambique has 21 recognized languages and many dialects. Despite recognition that a vast majority of the rural population does not master Portuguese, it remains the main language of education, communication and administration. The Government has now started the process of elaboration of a National Language Policy.

2. Health issues, such as hygiene and public health, must take into consideration the traditions that for centuries have regulated family lives. Sexuality, pregnancy and childbirth are embedded in specific cultural practices that reflect socio-cultural attitudes and perceptions which play a significant role in child and maternal mortality and the HIV and AIDS pandemic. Sexual taboos, gender relations, and specific cultural practices such as initiation rites, circumcision, polygamy, widow cleansing, etc., need to be taken into consideration if health programmes are to be effective. The element of social and human capital that is contained in the individual and collective motivation to plan and act is critical. The motivation to plan and act on these issues, can only spring from cultures as integrated frameworks of meaning, belief, knowledge and value, calling therefore for more holistic design of development models and interventions.

3. The joint programme on strengthening cultural and creative industries and inclusive policies in Mozambique is based on the United Nations Development Assistance Framework (UNDAF) for Mozambique, and contributes to the implementation of the National Poverty Reduction Strategy Paper (PRSP - (PARPA II), the Government 5-year plan, the Strategic Plan for Education and Culture 2006-2011, and the Employment and Vocational Training Strategy. It builds on lessons learnt from past and on-going implemented projects and is in line with UNDAF outcomes 1 and 4 for Economic Development and Governance pillars that aim at achieving Millennium Development Goals 1, 3, 7 and 8. It constitutes a valuable opportunity to support the One UN process in Mozambique by strengthening inter-agency cooperation in terms of planning, implementation, administration, budget and monitoring and evaluation. The Joint Programme will build on United Nations Educational, Scientific and Cultural Organization (UNESCO), International Labour Organization (ILO), and ITC (what is this?)experience to achieve the outputs set under the first component to promote cultural and creative industries' contribution to social and economic development. In the second component, FAO, UNESCO, the Office of the United Nations High Commissioner for Refugees (UNHCR) and the United Nations Population Fund (UNFPA) will work jointly to ensure inclusion of social and cultural aspects in development policies and strategies. The Programme will be implemented in close cooperation with the central and local governments, as well as national and international non-governmental organizations and local civil society organizations. A central element of the programme is building the capacity of national and local partners in order to ensure the sustainability of results.

4. The joint programme aims at promoting the contribution of cultural and creative industries to social and economic development in Mozambique and could be replicated perhaps in other countries of the region. Traditional resource management in forestry and wildlife could significantly contribute to these targets, at the same time safeguarding the cultural heritage of the countries involved. In many cases there is only limited information on traditional knowledge

systems, for that reason traditional knowledge systems do not enter development plans and are not sufficiently used in natural resource management such as forestry and wildlife. Main activities to achive an improvement could be first of all the collection, appraisal and description of traditional forest and wildlife management practices in selected communities or even on a broader level. In a second step community based organizations (CBOs) could be established and training on sustainable forest management under consideration of traditional practices provided. In particular, participatory preparation and updates of forest management plans could be carried out, including the support of village nurseries, sustainable economic forestry operations such as fuel wood production, poles or timber and their profitable transport and marketing. Experiences made should be disseminated to members of CBOs, non-governmental organizations, other stakeholders, schools and the general public. Improved acknowledgement and the use of tradtional knowledge systems in forestry and wildlife management will be beneficial for local communities and the resource base.

RECOMMENDATION TO THE COMMISSION

5. Forestry and wildlife Services in other African countries may wish to seek the inclusion of traditional knowledge systems in forestry and wildlife in their national UNDAF programmes in order to promote the recognition of the important contributions these sectors have to the social and economic developments of their countries.

November 2009

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African Forests and Wildlife: Response to the Challenges of Sustainable Livelihood Systems

LIST OF DOCUMENTS

FO:AFWC/2010/1 Provisional Agenda

FO:AFWC/2010/4 Forestry and wildlife in support of sustainable livelihood systems in Africa

(1) Protected Areas and the livelihoods of local communities

(2) Ecotourism and its potential for conserving forests and wildlife and alleviating poverty

(3) The role of non-wood forest products in food security and poverty reduction in Africa

(4) Bioenergy and forests in Africa

Sharing lessons from forestry and wildlife-related activities in Africa

(5) Integrated management of forests and wildlife for conflict prevention and maximization of benefits

(6) Invasive species and their economic relevance for and impact on forests and wildlife in Africa

(7) Wildlife legislation and the legal empowerment of the poor in sub-Saharan Africa

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FO:AFWC/2010/5	African Forestry and Wildlife Week: African forestry and wildlife: reflections on their sustainable management and benefits
	Heads of Forestry Dialogue – African forestry institutions: capacity development to meet the challenges of a changing world
FO:AFWC/2010/6.1	FAO activities in the Africa Region
	AFWC secretariat report on actions taken on the requests and recommendations of the 16th Session of the Commission
FO:AFWC/2010/6.2	Forest resources assessment and monitoring
	National Forest Monitoring and Assessment (NFMA): capacity development for collecting and reporting timely and reliable data on forest resources, forest and land-use change, forest uses and users to improve national policy and planning needs and country reporting to UN conventions and international processes.
FO:AFWC/2010/6.3	State of forest genetic resources in Africa: capacity development for procuring high-quality and accurate data forest genetics, including for the first State of World Forest Genetic Resources report
FO:AFWC/2010/6.4	National forest programmes: a platform for forestry development in Africa
FO:AFWC/2010/6.5	Regional and country projects
	i. Arid zone forestry in the context of biodiversity conservation, combating desertification and livelihood and food security needs in Sub-Saharan Africa
	ii. The forestry-water nexus in Africa: *Fouta Djallon* and other key water resources contributing to forestry livelihood support on the continent
	iii. Joint programme on strengthening cultural and creative industries and inclusive policies in Mozambique: One UN approach
FO:AFWC/2010/Inf.1	Information Note for Participants
FO:AFWC/2010/Inf.2	Provisional Timetable
FO:AFWC/2010/Inf.3	List of Documents
FO:AFWC/2010/Inf.4	List of Participants
FO:AFWC/2010/Inf.5	Summary outcome of the regional technical and validation workshop on "Guidelines on Practices for Sustainable Forest Management in Drylands of sub-Saharan Africa" Dakar, Senegal, 20-22 January 2010