

A report prepared for the project

Lessons Learnt on Sustainable Forest Management in Africa

STUDY ON FOREST ADMINISTRATION AND RELATED INSTITUTIONAL ARRANGEMENTS

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by

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LIST OF ABBREVIATIONS

AAS African Academy of Sciences

AFLEG African Forest Law Enforcement and Governance Initiative

AFORNET African Forest Research Network ATO African Timber Organisation

C&I Criteria and Indicators

CAMPFIRE Community Areas Management Programme for Indigenous Resources

CAP Country Assistance Papers

CBD Convention on Biological Diversity **CBFP** Congo Basin Forest Partnership **CBO** Community-Based Organisation

CBNRM Community Based Natural Resource Management

CBWM Community Based Wildlife Management

CEFDHAC Conference on Central African Moist Forest Ecosystems (in French)

CFM Community Forest Management

CI Conservation International

CIFOR Centre for International Forestry Research

CILSS Inter-State Committee on Drought Control in the Sahel **CITES**

Convention on International Trade and Endangered Species

CPR Common Pool Resources **CSP** Country Strategy Paper

DFID Department for International Development (UK)

DIDC Department for International Development Co-operation (Finland)

ECOFAC French abbreviation for Conservation and Rational Land Use of Forest Ecosystems in

Conference of Ministers in charge of Central African Forests (in French)

Central Africa project

EU European Union

COMIFAC

FAO Food and Agriculture Organisation of the United Nations

FCForestry Commission

FCCC Framework Convention on Climate Change

FD Forest Department

FOSA Forestry Outlook Study for Africa

FSC Forest Stewardship Council **FSMP** Forest Sector Master Plan **GDP** Gross Domestic Product **GEF** Global Environment Facility

GTZ German Agency for Technical Cooperation (in German)

HIPC Highly Indebted Poor Country

IGAD Inter-Governmental Authority on Development

IIED International Institute for Environment and Development IFIA Inter-African Forest Industries Association

IFF Inter-governmental Forum on Forests
IPF Inter-governmental Panel on Forests

ITTO International Tropical Timber Organisation

IUCN World Conservation UnionJFM Joint Forest Management

MDG Millennium Development Goal

NEAP National Environmental Action Plan

NEPAD New Partnership for Africa's Development

NFP National Forestry Programme NGO Non-Governmental Organisation

NTFP Non-Timber Forest Product

ONADEF National Office for the Development of Forests (Cameroon, in French)

PFA Public Forest Administration

PRSP Poverty Reduction Strategy Paper

SADC Southern Africa Development Community
Sida Swedish International Development Agency

SFM Sustainable Forest Management

SODEFOR National Forest Development Company (Côte d'Ivoire, in French)

SSA Sub-Saharan Africa

TFAP Tropical Forestry Action Plan

UNCED United Nations Conference on Environment and Development

UNDP United Nations Development Programme
UNEP United Nations Environment Programme

UNFF United Nations Forum on Forests

USAID United States Agency for International Development

WB World Bank

WSSD World Summit on Sustainable Development

WWF World Wide Fund for Nature

EXECUTIVE SUMMARY

Study objectives

This study on "forest administration and related institutional arrangements" is a component of a wider initiative jointly undertaken by the Royal Swedish Academy of Agriculture and Forestry (KSLA), the Food and Agriculture Organisation of the United Nations (FAO) and the African Forest Research Network (AFORNET) at the Academy of Sciences (AAS) on "Lessons Learnt on Sustainable Forest Management in Africa". The general objectives of the wider study were to:

- Analyse and establish what lessons have been learnt from positive and negative experiences of various initiatives, projects and programmes aiming at sustainable management, use and conservation of forests in Sub-Saharan Africa (SSA);
- Analyse and establish what ecological, economic, social and other pre-requisites are necessary for extending positive lessons to wider use (to more people, larger areas, other countries, etc.); and,
- Based on the outcome of the above analyses, to identify the most urgent issues and concerns for Africa to draw attention to in various international processes.

This component of the study aimed at assessing the past performance of Public Forest Administrations (PFAs) in selected countries with analysis of reasons for failures and successes and from there to crystallise critical issues that must be addressed for enhanced performance. In so doing, the study focused on the following specific objectives to:

- assess the overall state of forest administrations, providing information on the different mandates
 of PFAs and how the responsibilities have changed in response to the overall social, political and
 economic changes;
- assess the capacity of the PFAs in terms of technical, material and financial resources available and the changes during the last 10 years as regards the overall capacity;
- analyse the policy, institutional and political support to the PFA to enable implementation of sustainable forest management (SFM) and to what extent the necessary and sufficient conditions for an effective public administration of forests are in place;
- assess the ongoing efforts to decentralise forest administration in some African countries and, based on case studies, indicate their short term and long term impacts;
- examine the ongoing efforts on privatisation and enhancing the participation of communities in resource management and their implications on shifts in responsibilities for the PFA, including its ability to fulfil new functions for supporting the new arrangements; and,
- provide in-depth case studies of major administrative changes (for example the creation of autonomous forestry agencies like forest boards and commissions) and their impact in improving forest administration.

Lessons from success stories of changes in PFAs

Relevance of PFAs

Most countries in SSA increasingly recognise the great importance of their forest resources for ecological stability and socioeconomic development. Countries have sustained their PFAs right from colonial periods. During the last decade, there have been promising highest level political commitments to SFM and to strengthening PFAs in many countries. While these commitments have yet to be turned into actions, they indicate increasing recognition of PFAs and their functions. Accelerated deforestation and desertification are catalysts in this spiral of recognition. Clearly, PFAs remain relevant.

PFA capacities and effectiveness

Drastic staff reductions, resulting from economic structural adjustment programmes, have dealt debilitating blows to PFA capacities in most countries during the last two decades. Moreover, the new paradigm for SFM has ushered in new functions for PFAs, the capacity for which does not exist. In many countries, the HIV/AIDS scourge has further reduced PFA capacity.

The low PFA capacity combined with mushrooming official corruption and rampant illegal forest activities have rendered PFAs ineffective in many countries. However, some governments are taking action to curb corruption in this and other sectors. For example, in Kenya, the government has recently suspended all middle and senior staff of the Forest Department for screening against corruption.

Institutional profile

Compared to other government agencies, PFAs have remained lowly placed in government priorities and hierarchies. This has remained the case even in forest-rich countries like Central African Republic (CAR), Côte d'Ivoire, Gabon, etc., where governments benefit from substantial forest incomes. In many countries, operations of PFAs have been frequently destabilised through transfers from one government ministry to another. PFAs continue to suffer from undue interferences from higher levels of governments, particularly from presidential decrees and orders to offer state largess.

However, some recent developments among the countries in Central and West Africa (partner countries in CEFDHAC and the Congo Basin Initiative) have great potential to catapult PFAs to the front, through high-level regional political commitments.

Restructuring PFAs

Many countries have made commendable progress in forest policy and legislation reforms and have formulated new national forest programmes featuring these reforms. In a few countries, these developments have resulted in restructured PFAs. Good examples are to be found in Uganda, where the former Forest Department has been transformed into a more business oriented Uganda Forest Authority, and in Ghana where the former Forest Department has been transformed into Ghana Forestry Commission. Many more countries are at varying stages in similar restructurings.

Decentralisation of PFA functions

In a few countries, centralised PFAs stand as great misfits as governments have devolved governance. For example, recent changes in government structure (devolution) in Ethiopia have rendered the centralised PFA almost non-functional. Other countries, like Uganda, Ghana and Tanzania, are taking proactive steps to decentralise their PFAs in a more orderly manner within the frameworks of new constitutions and relevant legislations.

However, these attempts at PFA decentralisation have impacted negatively on forest management. In general, local administrations have shown little commitment to SFM and have very limited technical capacity. Local level capacity building ahead of PFA decentralisation is a critical requirement.

Devolved PFAs

Many countries are promoting collaborative forest management and community based natural resources management initiatives. While some of these are donor-driven, there are good examples of home grown ventures like Duru-Haitemba (Tanzania), Bwindi Forest Trust (Uganda), etc., which are functioning well with little control from central PFA. As these take root and prove viable alternatives, they establish the foundation for devolved PFAs.

Commercialisation of production functions

Most countries now recognise that PFAs are not the ideal agencies to be responsible for commercial forest production and marketing. The Zimbabwe Forestry Commission is a notable exception. Productivity and quality of plantations managed by PFAs continues to decline in most countries. While many countries have recently introduced macroeconomic development policies, which encourage the participation of the private sector, there are important limitations particularly with the long gestation periods and land tenure. On balance, the Zimbabwe PFA model may be the most desirable from the standpoint of commercialisation of production functions.

Resource mobilisation for SFM

There are two key issues with regard to PFA resource mobilisation for SFM: (i) forest income is often not ploughed back directly in support of SFM, and (ii) PFA is accorded low priority in government allocations. A few countries, like Tanzania, which have recently introduced forest income retention schemes, are already reporting successes in improving forest management. This is a promising avenue for other countries. With regard to the second issue of low government allocation, there is significant potential for PFAs to realise higher government allocations through more effective elaboration of the roles of forest sector activities on the overall poverty reduction strategy plans.

Conditions that facilitated institutional reform and improved performance

Regional and international consensus and agreements

In general, TFAP-driven country processes of the mid 1980s and early 1990s achieved little in reforming and improving the performance of PFAs. Most countries failed to implement the resulting forest master plans. In contrast, a few countries are responding positively to the UNCED/IPF/IFF/UNFF recommendations, particularly in embracing national forest programmes/plans (nfp) as the framework and vehicle for SFM. Accordingly, many countries are making good progress on the nfp process, particularly on the foundation policy and institutional reforms. One of the expected results from nfp processes will be new PFAs as already realised in Uganda, Mozambique, Ghana, etc. On this note, some regional initiatives like that of the AAS capacity building for nfp programme, have played significant roles in helping some countries to internalise recommendations from the continuing global forest dialogue.

Improved governance

The governments of many countries are introducing and/or entrenching more democratic forms of governance with enhanced accountability. A few countries have gone further to introduce specific anti-corruption measures, which are likely to improve the performance of PFAs. On the regional scale, the budding AFLEG has great potential to improve PFA performance in participating countries.

Changes in forest policy and legislation

There is international consensus that the starting points for the nfp process are forest policy and institutional reforms. Many SSA countries have been sensitised to this requirement and have initiated or adopted new forest policies and legislation. The legislation is guiding the transformation into new look PFAs as in Ghana, Uganda and a few other countries.

Revenue retention schemes and forest funds

A few countries have already established forest income retention schemes for direct support for improved forest management. A few countries, like Uganda, have moved a stage further in establishing a national forest fund and trust funds for specific forests. These avenues for mobilising additional resources have great potential to improve on-site forest management and to relieve pressure on the overstretched PFAs.

Replicability of the experiences

Improved governance

In most AAS countries, PFAs have been seriously weakened through high-level political interference and official corruption. Furthermore, PFA functions have been severely limited by civil wars in counties like Liberia, Sierra Leone, Democratic Republic of Congo (DRC), etc. Clearly, the experience is that improved governance is a prerequisite for well-functioning PFA, which is applicable across all countries.

Policy and institutional reforms

Most countries have recognised that they had outdated forestry policies and institutions and have initiated reforms. Moreover, there is international consensus that these reforms should also address UNCED/IPF/IFF/UNFF recommendations, particularly within the nfp framework. Suffice it to stress that this ushers in some new roles and responsibilities for PFAs. Experiences on these recent developments are replicable in all counties.

Resource mobilisation

There are clear indications that forest income retention schemes and establishment of forest funds will strengthen PFAs and improve forest management in all the counties. Experiences in this regard will be highly replicable.

Separation of PFA functions

Both forest-rich countries and countries which have, or plan to develop, substantial plantations have recognised the need to separate the public goods PFA functions from production and commercialisation

functions. This principle is also in line with the new macroeconomic development policies of most countries. Although rather unique in its evolution, the Zimbabwe Forestry Commission model would be the ideal for such countries. However, there are various country specific bottlenecks in adopting this model. Perhaps the move, in some of the countries, in establishing autonomous and businesslike forest authorities/services/commissions is the first step towards the ideal model. This first step is replicable across countries.

PFA decentralisation/devolution

The case studies on PFA decentralisation (Uganda) and devolution (Duru-Haitemba in Tanzania) emphasise the very specific circumstances in which these have been implemented. Moreover, there is need to study their impact for a longer period to learn sound lessons. Both are clearly not replicable across countries.

Summary of findings

- In terms of their structure and functioning, most PFAs have remained uniquely conservative in the face of great social and political changes in the respective countries. Many still hold on to structures and modes of operations established during the colonial periods. However, from the 1990s, a few countries have made commendable efforts in introducing policy and institutional reforms with major changes in PFA structure and functions.
- PFAs of most SSA countries are weak in their capacities to effectively plan and implement national forest programmes. During the last two decades, PFA capacities have sharply declined, partly as a result of the overall economic structural adjustment programmes. This decline has occurred during the period when forest management tasks are becoming more challenging with accelerated deforestation and illegal forest activities in many countries. In some countries, the performance of PFAs has been so low that their relevance is now questioned.
- In all the countries, PFAs are maintained as low profile government agencies. This is the situation even in forest-rich countries like Gabon, CAR, etc., where income from forest contribute significantly to the national budget. Even the great political hype about forests arising from UNCED and the continuing global dialogue has apparently had little impact on the profile of PFAs in SSA countries. The big problem with this low profile status is that forestry attracts little government resources.
- In many countries, PFAs face rapidly growing illegal forest activities and official corruption. In a few countries, this has developed into a runaway situation where forest law enforcement is no longer tenable. As a direct result, the esteem for PFA staff has waned and public support eroded. Urgent steps are needed to curb corruption. In this regard, the regional initiative, AFLEG, offers great potential in addressing illegal forest practices, particularly those of cross-boundary scale.
- Many countries are planning and/or implementing PFA transformations aimed at separating the public goods PFA functions from production and commercial functions. The general trend is to transform forest departments into more businesslike forest service/commission/authority. However, it is still too early to assess the effects of these transformations on forest management.
- In a few countries, there have been recent efforts to decentralise and/or to devolve PFA functions. In some countries, these developments have been brought about by overall devolution of governance. In these efforts, it has been recognised that PFA decentralisation/devolution ahead of capacity building to the local level leads to increased forest mismanagement.
- There is huge variation among the countries in respect of wealth in forest resources and in socioeconomic development aspirations. PFAs should be fashioned according to the country's specific forestry development challenges and potentials. Replicability of PFA experiences across countries should not be taken for granted. However, all countries need to make a start on policy and institutional reforms, which will guide decisions on new PFA structures and functions, and lay the foundation for formulating and implementing sound national forest programmes.

Recommendations

Out of the findings of this study, the following recommendations are made for the way forward:

- (i) Countries should take appropriate steps to stabilise and strengthen their PFAs through improved governance. In particular, steps should be taken to minimise ministerial transfers, political interference and corruption. In these respects, countries need to embrace emerging initiatives like AFLEG.
- (ii) Countries need to elevate the national profiles of their PFAs commensurate with the crucial roles forests play in national development. This could be achieved through better national accounting for the contributions of forest products and services to GDP and through high level policy advocacy. There is great potential for the emerging NEPAD forestry action plans to support these developments, largely through existing sub-regional organisations such as the African Timber Organisation (ATO), the Economic Community Of West African States (ECOWAS), the Permanent Inter-States Committee for Combating Drought in the Sahel (CILSS), the Inter- Governmental Agency for Development (IGAD) and the Southern African Development Community (SADC/FSTCU).
- (iii) Immediate steps should be taken to mobilise additional resources for PFAs through forest income retention schemes, national forest funds/trusts and through collaboration with NGOs and the private sector.
- (v) There is urgent need for continental and/or regional initiatives on capacity building for PFAs. In particular, there is need for such initiatives to help countries evaluate the appropriateness of the UNCED/IPF/IFF/UNFF recommendations and to help countries kick start sound nfps. It is in these lines that the relevant programmes of the African Academy of Sciences, NEPAD and other continental and regional organisations could play important roles.

1. INTRODUCTION

1.1 Background to the study

Forest administrations in most SSA countries were patterned according to relevant institutional arrangements of the former colonising countries. Thus, from the early 1900s, the PFAs in most the countries were crafted primarily to serve as replicas of "home country" forest civil services. Up to the end of the second world war, PFAs concentrated on implementing policies around delineation, gazettement and management of state forest and wildlife reserves, with emphasis on regulation of forest extraction, hunting and, in East Africa at least, on water catchment protection. Accordingly, the then forest policies and laws of the colonial administration focused on protection of state forest reserves. Immediately following the end of WW II, with increased presence of European "settlers" in some countries, PFAs suddenly became more complex and more proactive in their range of activities. New and more comprehensive forest policies were introduced to cater for more diversified activities, in particular the introduction of forest plantation programmes to meet domestic and industrial wood demands. PFAs also initiated training and research programmes.

Upon attaining their independence, most countries attempted reviews of their forest policies in line with the then significantly changed development realities. Thus, from early to late 1960s, many countries launched "home grown" policies and programmes. However, it turned out that the rather hastily promulgated revised policies were no more than poor replicas of the colonial forms, thinly coated with politically correct proclamations. Yet, development challenges for PFAs have radically changed since independence. In many countries, forest ownership and settlement have become politically explosive, forcing many governments to introduce radical changes in the way forest resources are controlled and managed and, thus, prescribing new roles for PFAs. But many PFAs have yet to fully adjust to such changes and remain sub- optimal in their functions.

Some previous PFA implementation strategies, like the *taungya* system of plantation development, have collapsed in some SSA countries. The accelerated deforestation and illegal forest activities in many countries force governments to question the effectiveness of their PFAs. For example, uncontrolled forest destruction has recently forced the government in Kenya to replace the traditional forest guards with paramilitary forces in protecting forests from illegal activities and to deploy military personnel in the Forest Department (FD). Similarly, many others have resorted to controlling logging and other illegal forest activities through extra PFA measures. Many countries have recognised the urgent need for comprehensive institutional review of their PFAs in order to stem the alarming destruction and illegal activities and to move towards SFM. For example, countries of the Central and West African humid forest zone have been party to the recent Yaoundé Declaration of the African Forest Law Enforcement and Governance (AFLEG) initiative, signed in 2003.

In most countries, PFAs have not sufficiently responded to the concerns and recommendations arising from the on-going global dialogue on forests. For example, international concern with deforestation in developing countries in the tropics culminated in a major global initiative, the Tropical Forest Action Plan (TFAP), according to which most developing countries have attempted more comprehensive and holistic national forest plans - popularly known as Forest Sector Master Plans or simply forest master plans (*FAO*, 1985). Essentially, the master plans elaborated new forest policies, necessary institutional reforms and national forest programmes, including significantly changed structure and functions for PFAs. Suffice it to stress that many countries made little progress in implementing their master plans. On the contrary, the necessary forest sector policy and institutional reforms coincided with the overarching economic structural adjustemnt programmes (SAPs). Indeed, until the early 1990s, the net effect of SAPs in many countries was to further weaken PFAs, relative to those of other sectors.

Clearly, there is an urgent need for SSA countries to address the needed restructuring and capacity building of their PFAs. Some countries have already made good progress on these lines and there are important lessons to be learnt from this. Others have plans to make a start and could greatly benefit from the lessons from those countries that have made some progress.

It is against this background that this study on "forest administration and related institutional arrangements" was conducted as a component of wider initiative jointly undertaken by the Royal Swedish Academy of Agriculture and Forestry (KSLA), the Food and Agriculture Organization of the United Nations (FAO) and the African Forest research Network (AFORNET) of the African Academy of Sciences (AAS) on "Lessons Learnt on Sustainable Forest Management in Africa". The wider study was accomplished with the following overall objectives:

- Analyse and establish what lessons have been learnt from positive and negative experiences of various initiatives, projects and programmes aiming at sustainable management, use and conservation of forests in Sub-Saharan Africa (SSA);
- Analyse and establish what ecological, economic, social and other pre-requisites are necessary for extending positive lessons to wider use (to more people, larger areas, other countries, etc.); and,
- Based on the outcome of the above analyses, to identify the most urgent issues and concerns for Africa to draw attention to in various international processes.

The specific objectives of this study within the overall project framework are described in section 1.3 below.

1.2 Forest administration in the context of sustainable forest management

In order to fully understand the pivotal position of PFA in the country's efforts to achieve SFM, it is instructive to start by examining a conceptual framework for achieving SFM in any country, for example the one by *Sukadri* (1997). Thus, the new forest paradigm requires that a country continuously assess the forest resource base, the continuous flows of forest products, the levels of environmental controls, socio-economic effects and institutional frameworks. Furthermore, the paradigm revolves around the implementation of sound forest policies, with clearly defined criteria and indicators. The bottom line is that a vibrant PFA is a critical pre-requisite for the resource evaluation, monitoring and for effective regulation of actors towards SFM.

Furthermore, it is important that countries address issues and concerns from the international dialogue on sustainable development, as agreed on in Agenda 21 of the Rio Earth Summit (UNCED, 1992) and reaffirmed during the Johannesburg World Summit on Sustainable Development (WSSD, 2002). Thus, as stated in the first paragraph of Chapter 37 of Agenda 21, "the ability of a country to follow sustainable development paths is determined to a large extent by the capacity of its people and institutions...." In line with this assertion, a well functioning PFA is a pre-requisite for SFM in any country (Pettenella, 1997).

Among the key recommendations of the on-going international dialogue on forests is the need to restructure PFAs to play new roles towards SFM. For example, in sharp contrast to the previous situation, where the PFA was the referee as well as the dominant player in the sector, it is now normal that countries formulate and implement national forest programmes (*nfps*) which recognise and promote roles and contributions from various players ranging from government agencies, NGOs, tree farmers, private sector, local communities, etc. Thus, the roles of these new players are now fully recognised and articulated in the new *nfps* while there is significant role change in PFAs from the previous centralised executing/implementing agency to a largely regulatory and standard setting agency.

It is in the context of the above that some SSA countries have embarked on high profile national and regional initiatives to achieve SFM based on the framework shown in *Figure 1*. For example, some of the countries have been party to promising high political profile regional initiatives on SFM. Some of these initiatives have been supported by bilateral and multilateral agencies and NGOs. Such initiatives, which include the Conference of Ministers in charge of Central African Forests (COMIFAC), the Conference on Central African Moist Forest Ecosystems (CEFDHAC), the Congo Basin Forest Partnership, etc., have focused on strengthening and refocusing the roles of PFAs. The New Partnership for Africa Development (NEPAD) is already formulating its continental action plans on environment and forestry. If these initiatives could be sustained and could translate into tangible actions, they could, among other things, enhance the profile and performance of PFAs.

1.3 Specific objectives and scope of the study

This component of the study aimed at assessing the past performance of PFAs in selected countries with analysis of reasons for failures and successes and from there to crystallise critical issues that must be addressed for enhanced performance. In so doing, the study focused on the following specific objectives to:

- assess the overall state of forest administrations, providing information on the different mandates
 of PFAs and how the responsibilities have changed in response to the overall social, political and
 economic changes;
- assess the capacity of the PFAs in terms of technical, material and financial resources available and the changes during the last 10 years as regards the overall capacity;
- analyse the policy, institutional and political support to the PFA to enable implementation of sustainable forest management (SFM) and to what extent the necessary and sufficient conditions for an effective public administration of forests are in place;
- assess the ongoing efforts to decentralise forest administration in some African countries and, based on case studies, indicate their short term and long term impacts;
- examine the ongoing efforts on privatisation and enhancing the participation of communities in resource management and their implications on shifts in responsibilities for the PFA, including its ability to fulfil new functions for supporting the new arrangements; and,
- provide in-depth case studies of major administrative changes (for example the creation of autonomous forestry agencies like forest boards and commissions) and their impact in improving forest administration.

1.4 Structure of the report

The introductory chapter of the report gives the background to the study, the conceptual framework for sustainable forest management and its logical linkages with PFA, the objectives and scope of the study. Chapter 2 covers the evolution of PFAs, and specifically presents the history of public sector forestry agencies, objectives of their establishment, their structure and functions, and their linkages to traditional arrangements for resource management. Chapter 3 deals with functions and structures of PFAs and covers their key functions, existing administration structures, institutional capacities, their general performance, incentives and constraints, and their linkage to administration in related sectors. Chapter 4 covers viability of PFAs and examines financial support and how the support is utilised, the extent to which they are self-supporting, conditions under which they earn a surplus from forest management, their ability to fully capture the benefits from forest management, and their overall economic viability. Chapter 5 covers efforts to enhance efficiency of forest administration. The contents of this chapter are based on case studies and specifically cover decentralisation of PFAs and its impacts, establishment of forestry commissions, boards, or corporations, and privatisation and commercialisation of forest plantations and industries, and trends in the devolution of natural forest management to communities and private sector. Chapter 6 covers lessons learnt on the performance of PFAs with sections on lessons from success stories, conditions that facilitated institutional reforms and improved performance, and on replicability of the experiences. Chapter 7 contains summary of findings and recommendations.

2. EVOLUTION OF PUBLIC FOREST ADMINISTRATIONS

2.1 Historical perspective

PFAs in SSA countries have evolved in different directions in response to changing forest policies and legislation, which in turn respond to changing overall national socio-economic development goals and aspirations. For the former British and German colonies, the 1900 Convention for the Preservation of Wild Animals, Birds and Fish in Africa (1900 Convention) set the framework for the establishment and functioning of the earliest PFAs in the continent (*Kameri-Mbote and Cullet, 1997*). PFAs were established in the former colonies from around 1900. This development was further boosted through the 1933 Convention Relative to the Preservation of Fauna and Flora in their Natural State (the 1933 London Convention), which prescribed specific guidelines to be followed by PFAs in all colonies (*Kameri-Mbote and Cullet, 1997*).

The former French colonies also established their PFAs from around the turn of the century patterned after the forestry establishment in France. However, there were variations in the structure and functioning of PFAs, depending on country-specific situations, up to the end of the 1930s. The promulgation of the French Union in 1940 was a watershed development for PFAs in Francophone

countries, with the French Ministry of the Colonies supervisory mandate over administrations in the colonies. From that point in time, PFAs were streamlined in their structures and functions and had marked similarities across countries, often functioning under ministries of agriculture, water and/or natural resources.

Between the mid-1940s and the beginning of the 1960s, PFAs steadily expanded and matured to effectively implement conservation and production functions. During the same period, two distinct models for PFAs were adopted among SSA countries – the British model in Anglophone and the French model in Francophone countries. There was notable convergence and uniformity in structure and function of PFAs among the countries for each of the two models. This was largely propelled by regular professional and governmental exchange of notes among the countries. For example, the British Empire Forestry Association and its successor the Commonwealth Forestry Association provided a very effective platform for exchange of notes among key actors in various countries. So strong were the imprints of colonial structures and functions of forest administrations that even after four decades of independence, many countries continue with their legacies to date. While the countries have reviewed their forest policies and legislation in line with changed development challenges, many present day inadequacies and limitations have their roots in the approaches adopted during colonial PFAs (Mandondo, 2000; O'Hara, 2002; Wily, 2002).

Through successive regional and international consensuses, agreements and exchange of experience among SSA countries, there emerged marked similarities in the structure and function of forest administrations traversing the Anglophone-Francophone divide. Even after independence, countries continued to exchange experience and institutional and strategic planning among themselves through such fora as the Commonwealth Forestry Association. In fact, one of the earliest SSA conventions ratified by the newly independent nations was the 1968 African Convention requiring signing parties "to adopt measures necessary to ensure the conservation, utilisation and development of natural resources in accordance with scientific principles and with regard to the best interests of the people" (Organisation of African Unity/IUCN, 1968). Thus, soon after their independence, SSA countries have attempted to harmonise their forestry development strategies. They have tried to adopt similar forest policies and legislations. However, there has been great variation in the extent to which they have been able to implement the policies and plans. Moreover, with drastically changed post-independence national development challenges, forestry has generally been accorded low development priority in most SSA countries resulting in steady weakening of PFAs.

After independence, most SSA countries have developed new forest policies and legislation in line with their national development aspirations. The new policies and legislation were first introduced in the mid- to late-1960s and have subsequently been revised. The countries were also signatories to important regional and continental agreements on forestry development. For example, under the aegis of the African Forestry and Wildlife Commission (AFWC), SSA countries signed the 1968 agreement on forests, pledging to observe the requirements for their forest reserves. Under OAU and ECA, countries were party to the Lagos Plan of Action, which established the development framework and strategy for African countries to the turn of the century. The plan was commendable in setting the right balance between economic growth and environmental sustainability. It accorded due coverage to the importance of forests and their wise management.

From the 1970s, many SSA countries made significant changes in the structure and functions of their PFAs, primarily to accommodate extension services and to strengthen community participation and benefits. These changes received a strong boost from the 1978 Jakarta Declaration of the 8th World Forestry Congress (*FAO*, 1978). Countries like Nigeria, Kenya, Zambia, etc., developed strong forest extension units within their PFAs. The rather sudden expansion of forest administrations was complemented with new training and research programmes.

From the mid-1980s, many SSA countries conducted comprehensive reviews of their forest sectors in line with the TFAP. Accordingly, significant policy and institutional changes were slated for action, including restructuring of the PFAs. However, very few countries were able to implement the TFAP-derived forest sector master plans (FSMPs). The proposed changes were overtaken by broader macroeconomic reforms and the general declines in economic growth. Consequently, PFAs have been steadily weakened from that period to their present poor states.

More recently, many SSA countries have made fresh efforts at reviewing their forest sector plans in response to recommendations from continuing global dialogue on forests. Chapter 11 of Agenda 21 (*UNCED*, 1992) and the subsequent global dialogue on SFM through the IPF-IFF-UNFF processes have assessed a wide range of forest specific and forest related issues world-wide and have identified

key thematic issues which call for urgent attention by all countries. For example, some concrete recommendations have emerged from these talks that all countries need to urgently undertake more comprehensive forest sector policy and institutional reforms and to formulate/implement sound national forest programmes (*nfps*). While a few countries, like South Africa, Uganda, Ghana, Tanzania and Senegal, have attempted to re-align their *nfps* according to these recommendations, many lack the political resolve and capacity to comply.

2.2 Operational objectives

The core function of PFAs, in the early colonial period, was protection of forests and wildlife. The general approach of PFAs in achieving their objectives was decidedly conservationist with functions centred on protection of the national forest estate. Characteristically, the head of forest administration in Anglophone African countries was normally given the title of *chief conservator of forests* to underpin this primary PFA function.

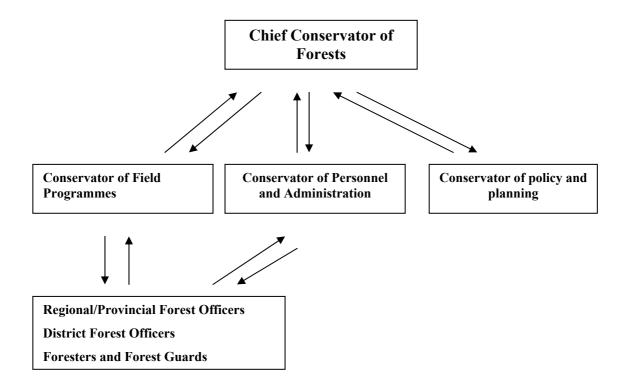
Over time, however, PFAs have broadened their operational objectives with dual focus on conservation and production. Typically, PFA formulate and implement forest policies with the following essential elements (*Owino*, 1990):

- 1. the need to gazette blocks of forests as state lands, in order to protect and enhance their functions in water catchment, as wildlife habitats, scientific values etc.;
- 2. the need to promote compensatory forest plantations with fast-growing tree species, required to support rapidly growing industrial, urban and agro-industrial developments; and,
- 3. the need to ensure that forest activities are implemented in integration with overall government policies for improving the socio-economic status of the rural poor.

2.3 Initial functions and structures

During the early colonial period, PFAs were largely focused on conservation (protection) of forests. The PFA had a distinctive uniformed forest guard outlook and functional approach. Indeed, in francophone countries, professionals in the forest administrations were also accorded responsibilities, rights and privileges of other uniformed staff in the government. This initial focus on forest protection was the basis for the highly decentralised functioning of the early PFAs. For example, the structure of PFAs in most Anglophone countries was initially as depicted in *Model 1* below.

Model 1. Typical structure of forest administration in early colonial period.

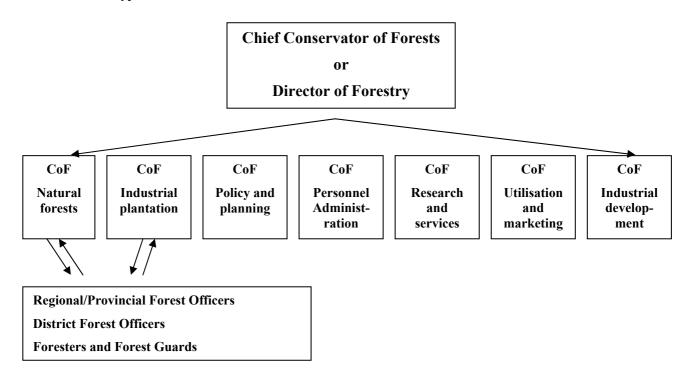


From around 1940, PFAs of many countries have gradually expanded their functions into other areas like industrial plantation development, forest extension, community forestry, agroforestry, etc. With intensification of plantation programmes, the need arose for additional conservancies to cater for industrial plantations, forest industrial development, research, forest product marketing and utilisation. Of course, there was great variation among countries in the structure of forest administrations depending on the extent to which they took on additional roles. In general, the high forest cover countries in the humid lowlands strengthened their administrative structures in the directions of forest products marketing and utilisation while the low forest cover countries, largely in eastern and southern Africa, strengthened theirs in the direction of industrial plantations. Low forest cover countries in the Sudano-Sahelian belt retained forest administration structures depicted in *Model 1*. The typical structure of PFA in the 1960s in Anglophone countries is depicted in *Model 2*.

2.4 Linkages with traditional arrangements for resource management

The many conflicts encountered in forest conservation and utilisation in most SSA countries stem from the weak or non-existent linkages between the adopted forest policies and legislations and traditional arrangements for natural resource arrangements (*Adeyoju*, 1981; *Owino*, 1990; *Ribot*, 1997). For example, forest legislation in most Anglophone countries were based on English law reasoned on the general contexts of nuisance, trespass and public property (*Okoth-Ogendo*, 1980; *Adeyoju*, 1981). The traditional strategy of PFAs policing against trespass in government forests has alienated local people from what they perceive to be their resources. The strategy has locked out populations from their livelihood safety nets and precipitated serious political tension in many countries. In contrast, the strategies adopted for management of dry forests (parklands) in the West African Sahelian countries like Mali, Burkina Faso, Chad, etc. - have generally been in consonance with traditional arrangements for natural resources management. Traditional tree tenure and control of use forms the basis of resource management (*Boffa*, 2000).

Model 2. Typical structure of forest administration in the 1960s.



CoF = Conservator of Forests

More recently, PFAs in many countries have taken steps to broaden their development strategy beyond the colonial era closed forest reserves strategies of forest conservation to more access and participatory strategies, including joint forest management (JFM) or collaborative forest management (CFM)

strategies (*O'Hara, 2002; Wily, 2002; Kajembe et al., 2003*). Since the early 1970s, many PFAs established forest extension services as important windows of support to social and community forestry programmes. Thus, much in line with the Jakarta Declaration on social aspects of forestry, many SSA countries have shifted emphasis towards people-oriented forestry development programmes. These shifts in forestry development goals have necessitated important changes in the structure and functioning of PFAs in most countries in the last two decades or so.

3.0 FUNCTIONS, STRUCTURES AND INSTITUTIONAL ARRANGEMENTS FOR PFA

3.1 Main functions of PFA

The main functions of PFAs in relation to other actors in the sector, in most of the countries, are highlighted in *Table 1*. In general, current PFAs play dominant roles (often the sole actor) in regulation and execution of most activities in the forest sector. This is in contrast to the situation in other continents where a significant proportion of forests are owned and controlled by individuals and the corporate sector. However, some countries are introducing changes in the forest sector with other actors coming on board. The following are current and emerging functions of PFAs:

Policy and legislation

This remains the cardinal PFA function in all countries. In earlier periods, this function was accomplished in a narrow sectoral basis. More recently, however, PFAs have adopted more participatory and cross-sectoral approaches in accomplishing this function.

National forest plans/programmes

Most countries have sustained central planning units within their PFA to prepare, review and harmonise the implementation of national forest plans/programmes. This function has received emphasis particularly since the TFAP from the mid-1980s.

Management of forest reserves and other protected forest areas

PFAs have the responsibility for management and protection of forest reserves within gazetted forest land. However, with recent calls on countries to address sustainable management of all types of wooded vegetation and with mounting pressures on forests, this responsibility is proving to be far beyond the capacities of PFAs alone. Thus, in several countries, policy and institutional changes are being introduced to also engage the participation of local governments and local communities.

Management of plantations on government lands

In most countries, with notable the exceptions of Zimbabwe and South Africa, PFAs have been responsible for plantation development on government forest land. However, for various reasons, this arrangement has not proved to be viable and industrial plantation programmes of most countries have experienced steady declines in the last two decades. In fact, this line of development has nearly come to a halt in countries like Ethiopia, Kenya, Zambia, etc. Recently, a few countries, like Côte d'Ivoire, Uganda and Tanzania, have introduced new policies essentially handing over industrial plantations to more business-oriented agencies, including the private sector.

Forest research

There is great variation in institutional arrangements and responsibility for forest research among the countries. Several countries have established quasi-government forestry research institutions, including Nigeria, Ghana, Senegal, Kenya and Malawi. Other countries have forestry research functions located under quasi-government agriculture research institutions. These include Rwanda, Eritrea, Ethiopia and Uganda. A few countries, notably Tanzania, have strong forestry research programmes conducted by university forest faculties as supplements to government research institutes. It is noteworthy, however, that there are but very countries, like the Republic of the Congo, where PFAs still have the responsibility for forestry research.

Forestry extension

From the 1970s, most SSA countries have established forestry extension units within their PFA structures and functions. For example, the Kenya Forest Department established, in 1971, the Rural

Afforestation and Extension Service (RAES). The new extension units were politically attractive and received strong financial support from governments through the 1980s. They also attracted substantial donor support during the same period. However, since the early 1990s, PFAs have progressively scaled down their direct involvement in extension while other actors, particularly NGOs, have become significant extension service providers.

Management of private plantations/woodlots

Encouraged by availability of fast-growing varieties and increasing prices of tree products, tree growing has become popular among farmers in some SSA countries, right across the economic spectrum. PFAs have recognised the opportunities to achieve environmental amelioration and to satisfy future needs for forest products through private plantations/woodlots and are actively promoting and supporting this development. However, for these to be viable, PFAs need to create and sustain supportive policy and regulatory frameworks.

Licensing of forest activities under the forest act

In principle, this remains the preserve of PFAs in most countries. All current forest legislations are clear on this function. However, most of the countries lack the necessary political commitment and resources for effective law enforcement.

Training of forestry staff

From the 1940s, PFAs assumed direct responsibility for education and training of staff required for its operations. Thus, most PFAs established Technical Forestry Colleges for training its staff to certificate and diploma levels. Examples included Olmotoni College (Tanzania), Nyabyeya (Uganda), Wondo Genet (Ethiopia), Londiani (Kenya) and Sunyani College (Ghana). From the 1970s, some PFAs appealed for, and supported the establishment of, professional training in forestry at national universities. This has culminated in academic forestry programmes in Universities in Uganda, Tanzania, Kenya, Ethiopia, Sudan, etc.

Integration with regional/international forestry initiatives

PFAs are the national focal agencies for the relevant international agreements and conventions. In coordination with the Ministries of Foreign Affairs, PFAs are also the national focal points for relevant regional arrangements and protocols, involving organisations such the EAC, IGAD, COMESA, etc.

Development of forestry trade and investment

In co-ordination with Ministries of Trade and Industry, some PFAs have the important functions of promoting and regulating forestry trade and investment. This particular role is assuming greater significance in forest rich countries like the Central African Republic, Gabon, Ghana, Côte d'Ivoire, Cameroon, etc.

Monitoring and evaluation of implementation

PFAs have the responsibility to monitor and evaluate the implementation of the country's national forest programme. In the ideal situations, PFAs are expected to establish and to publish updated country-wide state of progress reports.

Table 1. Key functions and responsibilities of various actors in the forest sector.

Functions	Actors				
	Public forest administration	Research inst., universities, etc.	Local government	NGO/Civil society	Private sector
Formulation and revision of policy/legislation	Main function/ responsibility	Supporting function	Minor contributor	Minor contributor	Minor contributor
National forestry development strategies/plans	Main function/ responsibility	Supporting function	Minor contributor	Minor contributor	Minor contributor
Management of forest reserves/	Main function/	Supporting	Increasing function/	Providing	Minor

protected areas	responsibility	function	responsibility	support	contributor
Management of govt. plantations	Earlier main function/respon- sibility. Now reduced function.	Supporting function	Minor contributor	May provide support	May assume significant increased responsibility
Forestry research	Minor contributor (in most countries)	Main function/ responsibility	Observer	International NGOs may contribute	Minor contributor
Forestry extension	Main function/ responsibility	Supporting function	Supporting function	Supporting function	Minor contributor
Management of private woodlots	Advisory function	Supporting function	Supporting function	Supporting function	Increasing function
Licensing of activities under the Forests Act	Sole function/ responsibility	Observer	Observer	Observer	Observer
Training of forestry staff	Main function for technical level staff	Main function for professional staff	Observer	Supporting function	Minor contributor
Integration with regional/international forest initiatives	Main function/ responsibility	Supporting function	Observer	Supporting function	Observer
Development of investment/trade	Main function/ responsibility	Supporting function	Observer	Supporting function	Increasing function
Monitoring and evaluation of implementation	Main function/ responsibility	Supporting function	Minor contributor	Supporting function	Minor contributor

Existing administrative structures

Most countries continue with the PFA administrative structure shown in model 2 in section 2.3. Essentially, such PFAs function in a highly centralised, top-heavy command fashion with most management decisions (even at the forest level) requiring headquarters approval. Staff at regional, district and individual forest levels has little delegated authority. This prevalent PFA administrative structure is, however, recognised to be ineffective in present circumstances. For example, with dwindling resources, there is often a disconnect between HQs and field operations thereby opening gaps for illegal forest activities reported in many countries. The structure also provides little room for harmonising national and local interests. Furthermore, the attendant bureaucracy has greatly compromised efficiency of operations.

Recently, a few countries have addressed some of the weaknesses above and have introduced measures, which have significantly changed PFA administrative structures. Firstly, PFAs have had to adjust to the overarching changes in the governance structure of the countries. Examples are found in Eritrea, Ethiopia, Uganda, Tanzania and Ghana, where governments have embraced devolution in governance. Thus, in Eritrea, the PFA takes the structure of a lean Division of Forestry and Wildlife (within the Ministry of Agriculture) providing oversight for strong programmes of regional devolved units. In Ethiopia, what was once a strong Forest Department was reduced to a "Team" with oversight responsibility for regional programmes in a highly decentralised manner.

Secondly, a few countries have taken steps to convert their PFAs into more business-like outfits. In Zimbabwe, the Forestry Commission has operated in this fashion since 1950s; Côte d'Ivoire established a Forest Development Cooperation (SODEFOR) in 1992 and transferred some of the PFA functions (production and commercialisation); Sudan established Forest National Corporation in the early 1990s; Ghana established the Forestry Commission in 1999; Uganda established the National

Forest Authority in 2003; just to mention a few. These developments have led to adoption of radically different administrative structures and/or splits in structure and functions of PFAs.

Thirdly, the remits of PFAs in some countries have been broadened beyond forestry with major changes in their administrative structures. For example, the Ghana Forestry Commission has a Wildlife Division. Forestry and wildlife fall under one administrative unit also in Eritrea, Rwanda and Togo. Some countries in the Sahelian belt run departments of forestry and rural development or forestry and environment. It is the general trend in many countries for governments to introduce changes in PFA structures both in line with the overall integrated development strategies and in line with the overarching economic structural adjustment programme.

Institutional capacities

It is widely recognised that forestry institutions in SSA have weak capacities to fulfil their functions (AFWC, 1995). While faced with escalating tasks and challenges for SFM, the human capacity of PFAs has drastically declined during the last two decades, largely as a result of "right sizing" exercises in government departments. The few remaining staff members are overstretched in their responsibilities and are afflicted by low morale due to low remuneration. Furthermore, the rampant corruption in public service has seriously eroded public respect for PFAs of many countries.

Moreover, the new paradigm for SFM requires additional skills and facilities, which are non-existent in current PFAs. In particular, most PFAs are very weak in policy analysis, resource inventory, social sciences and strategic planning. Many of the countries have merely continued to pursue policies developed in colonial periods and have only introduced partial policy—changes in response to problems as they arise. Only a few countries, like Nigeria, South Africa and Zimbabwe, have been proactive in policy analysis and changes (*King, 1969; Adeyoju, 1995; Dykstra et al., 1997*).

3.4 Assessment of PFA performance

The performance scorecard of most PFAs is disappointing in many aspects. Indeed, the scorecards attest to the current general public perception that, as institutions, the existing PFAs are largely outdated in their structure and function, sometimes bordering on irrelevance. The following highlights of PFA performance are pertinent.

3.4.1 Arresting deforestation

In most countries, the alarming deforestation mostly takes place in forests and woodlands, which are outside gazetted forest land. Within the framework of the existing forest policy and related legal instruments, PFAs remain mere observers. Moreover, the pressure for deforestation is so strong that PFAs are unable to arrest it even within gazetted forest land.

Deforestation is the most serious threat to SFM in most countries in SSA. It has a complex web of underlying factors, which do not lend themselves to easy solutions in isolation. They all coalesce around the hunger-poverty-energy triangle. It has become generally accepted that effective mitigation of deforestation rests with improving technologies for food production in ways that also assure sustained services and products of trees and forests. Thus, agroforestry food production systems could play significant roles in SFM. It is also in that context that the work of the World Agroforerstry Centre (ICRAF) should be of great value. In Sahelian West Africa, the experience of participatory management of natural forests for woodfuel and other NWFPs is another opportunity for securing sustainable management of fragile ecosystems.

3.4.2 Controlling illegal logging and forest law enforcement

As already mentioned, illegal forest activities in many SSA countries have reached alarming proportions and have been the subject of international concern and discussions. Illegal forest exploitation and corruption pose serious challenges to forestry development (see *Box 1*). The illegal practices deplete resources and rob the countries of funds that could be used for SFM. Moreover, illegal practices have even more serious and long-term consequences in scaring potential investors in the sector. Their elimination could prove intractable as they are embedded in the overall official corruption and non-transparent systems of governance. In this regard, it is significant that Kenya, Uganda and

Tanzania are ranked in the top ten most corrupt countries in the world according to their Corruption Perceptions Indices (*Transparency International Report, 2001*).

BOX 1

Illegal invasion of public forested lands is a major problem in Ethiopia and Kenya. In Kenya, this could become a disincentive for investment in forest plantations by the private sector. In addition, illegal logging and woodland arson is rampant in all the countries, but particularly in Ethiopia and Kenya. Illegal transport and trade in timber is on the increase. This illegal trade in timber has recently assumed international dimensions with the operations of Uganda-Thailand enterprise, DARA-Forest (a subsidiary company of the DARA Great Lakes Company) working with a Ugandan sister company, Nyota Timber Industries, involving smuggling of timber from the Democratic Republic of the Congo and exporting the same to Kenya, Belgium, China, Denmark, Japan, Switzerland and United States of America (*Nations Security Council, 2001*). The smuggled timber is given bogus certification in Uganda before export to other countries.

The countries fully recognise the need to address the growing illegal trade in forest products, which deprives many countries of forest revenue and which results in forest degradation. It is in this context that some countries in the humid forest belt of Central and West Africa have recently agreed on a declaration on forest law enforcement and governance (AFLEG) highlighted in *Box 2*.

Box 2. Africa Forest Law Enforcement and Governance (AFLEG); Yaoundé Declaration and Action Plan; AFLEG Ministerial Meeting, June 18-20, 2002

I. Information

Governmental representatives recognised the importance of the use of high quality information related to forest resources, their management and trade. To foster increased information collection and sharing, capacities of public administrations, the private sector, civil society and other entities could be strengthened, and communications, cooperation and transparency between them improved.

II. Legislative Reform

Governmental representatives discussed the need for comprehensive and coherent legislative frameworks, recognising that in many African countries laws relating to forests are poorly adapted to present conditions. This included issues such as coherence with other sectoral laws, attention to traditional laws and land use, protection of the legitimate interests if all sectors of society, decentralisation, transparency, the role of public-private partnerships, and the potential for codes of conduct.

III. Law Enforcement and Situations of Armed Conflict

Governmental participants recognised that armed conflicts have had disastrous impacts on many forest areas in Africa, and that in many cases illegal logging has been a source of funding for conflicts and conflicts have resulted in the destruction of both traditional and modern forest management institutions thus rendering law enforcement impossible.

IV. Capacity Building

Governmental representatives recognising the need to build capacity for the application of forest laws, by strengthening capacity of all institutions concerned with forests and supporting staff appropriately.

3.4.3 Implementation of sustainable forest management

In many of the countries, the transition from the current state of forest management to SFM is most challenging and calls for major changes in policy, legislation and forest field practices. Despite the

enthusiasm generated by the TFAP in the mid-80's, national efforts to review forest policies and legislation have been hampered by little political commitment and lack of clear support from decision-makers. Governments are more preoccupied with review of policies for other sectors such as agriculture, commerce, industry, etc. This is compounded by the characteristic weak capacity for policy analysis, formulation and implementation in the forestry sector.

At the forest level, some countries have tried to address some of the pre-requisites for SFM, particularly the criteria and indicators (C & I) for successful SFM, for example, by being party to the on-going elaboration of C & I for the Dry-Zone Africa. Other countries have been party to the African Timber Organisation (ATO) led initiative C & I for humid forests. However, the level of consultations among African experts and stakeholders on this key aspect of SFM remains sporadic and superficial. Few national forest services have evaluated the feasibility of the evolving C & I. Some countries in southern Africa are working in collaboration with CIFOR with application on the Miombo woodlands and in countries with humid forests in central and western Africa.

3.4.4 Management of plantations

In many of the countries, the quality of management of industrial plantations have declined steeply due to shortage of labour and other inputs, with significant proportions of existing plantations being low in productivity and health. PFAs are no longer efficient managers of plantations and it is expected that the current plantations managed by PFAs will be gradually handed over to the private sector. The expected change in responsibility for plantations could result in some improvement in management and limited expansion in the initial years. But eventually, plantation expansion will face a number of constraints, especially availability of suitable land. Establishment of large scale industrial plantations is unlikely to emerge as an important option for many countries, except possibly in some less densely populated countries like Tanzania, Zambia and Mozambique.

3.4.5 Management of wildlife resources

Probably the most important natural asset, particularly in Eastern and Southern Africa countries, is wildlife resources, which forms the main basis of the once booming tourism industry (see *Box 3*). Although depressed by insecurity and poor investment, tourism continues to make significant contribution to GDP and foreign exchange earnings. International tourism receipts for Kenya and Tanzania in 1997 were estimated as US\$ 502 million and US\$ 360 million, respectively. Much of this is attributed to the wildlife in these countries.

Box 3 Tourism in Kenya – some facts

In Kenya, the tourism industry is a major source of foreign exchange and employment despite recent woes. The industry provides about 180,000 direct and 300,000 indirect jobs due to the labour intensive nature of activities.

Kenya has adequate tourism facilities including accommodation and transport. However, perceptions of insecurity have seriously affected the industry. The worst period was in 1998 when ethnic fighting in some parts of the country, and then again after the terrorist attacks on the US embassies in Nairobi and Dar es Salaam, caused sharp declines in the number of tourists coming into the country. Now the industry is getting back on track with major marketing efforts by the Kenya Tourist Board. Kenya's tourism is robust and capable of sustainable growth. There are some promising signs that Kenya will regain its past glory as tourist destination.

3.4.6 Facilitating forest and tree resource management by farmers

Where there is secure tenure, trees grown in farmlands are becoming a significant source of the country's wood requirements (FOSA, 2003; FAO 2003). In countries like Kenya and Ethiopia, trees grown outside forests in farmlands by far outnumber those grown in forest plantations. Encouraged by availability of fast-growing varieties and increasing prices of tree products, tree growing has become popular among farmers right across the economic spectrum. There are great opportunities to achieve environmental amelioration and to satisfy future needs for forest products through tree farming. The

present surge in tree growing by farmers is based on the realistic assumption that the present and projected huge gaps between supply and demand for tree products will sustain attractive prices through market mechanisms. However, the needed investment in growing good quality woodlots and forests can be prohibitive and most farmers will need support to sustain their tree growing activities into the future. For this trend to be sustained, PFAs have to be more proactive in its promotion and regulation.

On the other hand, tree resources in communal land is likely to be depleted largely due to the weaknesses of communal management and more particularly the current systems guiding the use of communal land. Moreover, land and tree tenure in countries like Eritrea and Ethiopia pose major limitations to tree growing by individual farmers.

3.5 Incentives and constraints to effective PFA

Partly related to the recurrent low priority accorded to forestry in government resource allocations, PFAs of most countries are much weaker than was the case some ten years ago. Many countries are struggling with economic structural adjustment programmes and, in the initial stages, national institutions (including PFAs) have been further weakened. So far, SAPs in most countries have concentrated on corrective measures for the agricultural sector in which forestry is usually not accorded the attention it deserves.

In many countries, available financial resources are well below the minimum required to plan and implement SFM. Institutional capacity building is a crucial prerequisite for SFM. In this regard, African countries need to commit much more of their own resources to strengthen their forestry institutions including training and research institutions. In addition, the countries need substantial support from international co-operation programmes. Although some countries, like Tanzania and Ghana, have recently introduced forest income retention schemes, which are directly used for improved forest management, this still falls far short of the resources that should be mobilised for SFM.

3.6 Linkage between PFA and administrations in related sectors

A major limitation in implementing forest policies in most countries is that policy formulation and design for their implementation have been narrowly sectoral. Furthermore, implementation has remained highly centralised with weak logical linkages with administrations in related sectors. For example, development planners fully appreciate the roles of forests in water catchment management, as energy source, as provider of livelihood to rural population, etc. Yet, in most cases, these roles are not assigned economic value and are often left out in national accounting systems. In most countries, the working linkages between PFAs and administrations in related sectors such as water, energy, environment, rural development, etc., remain weak (FAO, 1983; FAO, 2003). There has been a characteristic tendency for PFAs to operate as "lone rangers" in national development. Even in those countries where PFAs function within ministries of water, lands and environment (e.g. Uganda), or ministries of agriculture and environment (e.g. Ethiopia, Benin, Mali, Senegal), ministries of water and forests (e.g. Gabon, CAR), the lone ranger PFA has persisted.

There is a big challenge in most countries for PFAs to develop effective working links with many related actors both on the cross-sectoral axis and within the sector. Within the sector, PFAs are in early learning phases in linking with NGOs in progressively more decentralised implementation arrangements. A recent study in South Africa, as part of "Managing the Environment Locally in Sub-Saharan Africa (MELISSA)" has highlighted some preliminary working principles in this regard (*MacDevette*, 2003).

3.7 Performance of PFAs in the context of the overall performance of the public sector in other areas.

Compared with other public service agencies, PFAs have been given a low profile by many governments and are amenable to exploitation and easy changes. For example, in Cameroon, the PFA went through three successive major changes of high-handed political nature (presidential decrees) between 1990 and 1993. In CAR, the long established *L'Office National des Forets* (ONF) was abruptly dissolved in 1993 through presidential decree. Furthermore, PFAs of many countries have been easy targets for official corrupt arrangements. In countries like Kenya, governments have

allocated large tracts of forests as state largesse to politically well-connected individuals. The net effect of such interferences with PFAs has been to destabilise their performance relative to other public service agencies.

The narrow focus of forestry in the past has brought it into confrontation with other sectors competing for the same land resources and this has been one of the factors resulting in the current generally beleaguered PFAs (Owino, 1990).

Rediscovering forestry as an integral part of land use is the most important step to make sure that all land uses take into account the important roles of trees and forests. Probably it is more important to have forest and tree resource management spelt out in land use policies, especially agriculture and animal husbandry, rather than having a stand-alone forest policy. This will be particularly the case both in the densely populated uplands and the arid and semi arid lands.

Moreover, the existing institutional weaknesses could persist and ongoing efforts to enhance resource availability to the sector through various revenue retention arrangements (e.g. Tanzania) and establishment of parastatal bodies to provide flexibility of operations (Uganda) may not necessarily provide long term solutions. Decentralisation of forest administrations to provincial and local levels is in itself unlikely to improve the situation, especially in the context of the low priority that is likely to be given to the sector and the limited capacity of local and provincial administrations.

Research, education and training institutions are also likely to remain weak and ineffective largely due to resource constraints, but also due to their inability to provide effective leadership in brining about technological and economic transition in the forestry sector. While there will be some growth of private goods research, largely undertaken by the private sector directly or through sponsored research, public goods research is likely to remain weak. Increase in productivity in private sector plantations may be largely through private sector research or through introduction of technology from outside. Although traditional technology will form the basis of most informal sector activities, investment to improve this is likely to remain low.

4.0 VIABILITY OF PUBLIC SECTOR FORESTRY

4.1 Financial support to PFA and how the resources are mobilised

A recent survey of public expenditure in forestry in selected SSA countries provides valuable information and data on financial support to PFAs (FAO, 2001a and 2003). Table 2 shows trends in public expenditure on forestry in selected countries. At current prices, only two (Burkina Faso and Kenya) of the 16 selected countries had registered negative average annual increase in total public expenditure on forestry during specified periods in the 1990s. Although some of the periods covered are too short for trend determination, public expenditure on forestry in the selected countries appears to have remained the same or increased slightly through respective periods. A few countries, like Ghana, Malawi and Zimbabwe registered substantial increases.

Country	Time period	Average annual increase in total expenditure on forestry (%)	
		At current prices	At constant prices
Burkina Faso	1996 - 1999	- 6	- 11
Burundi	1990 - 2000	+ 4	- 5
Central African Republic	1996 - 2000	+ 8	- 11
Chad	1991 - 2000	+ 10	+ 1
Côte d'Ivoire	1990 - 1999	+ 5	- 4
Ethiopia	1997 - 1999	+ 3	- 5
Gambia	1995 - 2000	+ 1	- 3

Ghana	1990 - 1999	+ 37	+ 8
Kenya	1995 - 2000	- 7	- 18
Malawi	1990 - 1999	+ 26	- 4
Mali	1992 - 1999	+ 16	+ 6
Mauritius	1996 - 2000	+ 6	- 3
Niger	1991 - 1999	+ 8	+ 1
Nigeria	1993 - 1999	+ 16	- 18
Senegal	1990 - 1999	+ 6	0
Zimbabwe	1996 - 2000	+ 59	+ 25

Source: FAO State of the World's Forests 2003

Table 3 shows the sources of public expenditure in the sector in selected countries during 1999. There was great variation as to how countries mobilised for public forestry expenditure. In some, like CAR, DRC, Côte d'Ivoire and Liberia, large proportions of public expenditure is derived from forest revenue. These also happen to be forest-rich countries. In other countries, particularly forest-poor countries like Ethiopia, Lesotho, Kenya and Mail, the bulk of expenditure is sourced from government budgets. Among the countries included in the review, the average proportion of the expenditure sourced from international development partners was 41%. However, some countries, like Burundi, Madagascar, Chad, Mali, Niger, Senegal and Tanzania, remain heavily dependent external sources for their public expenditure on forestry.

4.2 Extent to which PFAs are self-supporting

Currently, very few countries have PFAs that are self-supporting (Côte d'Ivoire and CAR are examples). A few more forest-rich countries have the potential for their PFAs to become self-supporting, if certain conditions are satisfied. Other countries must explore some innovative ways to increase investments in forest management for their PFAs to become self-supporting. For example, Ghana and Tanzania are making commendable efforts in this regard by introducing forest revenue retention schemes for direct reinvestment into forest management. Such countries are already reporting significant improvements in their status of forest management and protection. Indeed, there are early indications that some PFAs could become self-supporting. Other countries are aiming at higher public sector investment by better articulation of the role of forests in their poverty reduction strategies. Many countries are introducing policies and regulations aimed at encouraging private sector investment. Other countries are also pressing for valuation and payment for traditional forest services such as water, ecotourism, biodiversity conservation, etc.

Table 3. Sources of public expenditure (in US\$ 000) in the forest sector in selected African countries in 1999.

		Total public expenditure			
Country	Revenue	Domestic financing	External financing	Total	
Burkina Faso	780	2,201	2,328	4,530	
Burundi	50	193	1,198	1,391	
CAR	5,566	1,030	n.a.	1,030	
Chad	60	471	3,960	4,431	
Côte d'Ivoire	41,561	32,971	7,566	40,538	
DRC	803	1,277	0	1,277	

Ethiopia	2,283	21,345	3,865	25,209
Gambia	225	242	445	686
Ghana	12,559	31,294	n.a.	31,294
Guinea	902	7,362	8,551	15,913
Kenya	1,845	17,407	1,054	18,461
Lesotho	44	521	119	639
Liberia	3,100	7,317	0	7,317
Madagascar	2,734	4,385	7,255	11,641
Malawi	110	3,992	n.a.	3,992
Mali	321	4,830	9,896	14,726
Mauritius	770	5,603	0	5,603
Namibia	68	2,548	2,767	5,335
Niger	351	773	6,612	7,385
Nigeria	2,572	12,580	8,241	20,821
Senegal	1,579	2,835	10,578	13,413
Uganda	763	1,282	2,386	3,668
Tanzania	2,763	7,567	31,773	39,340
Zimbabwe	908	2,132	1,254	3,386

Source: FAO State of the World's Forests 2003.

4.3 Conditions under which public administration earns a surplus from forest management

In many countries, inherently low land productivity and the fact that the bulk of the population is concentrated in the limited high potential land, there is intense pressure on land, particularly for agriculture and settlement. Resource use conflicts, between settled cultivators and pastoralists, between forestry and agriculture, and between wildlife and domestic cattle are hence widespread. Increase in population has resulted in fragmentation of land and extension of cultivation to marginal areas resulting in degradation. In countries like Ghana, Nigeria and Kenya, the "taungya" system introduced to reduce conflicts between agriculture and forestry has become ineffective and there has been substantial excision of forests, including plantations. Even in Tanzania, with low overall population density, the historical pattern of development has led to concentration of population in the more productive areas resulting in intense land use pressures.

Many countries, particularly those in the Sudano-Sahelian belt, have large areas of arid and semi-arid land with annual rainfall well below 1000 mm, and with extensive areas receiving less than 500 mm and a very long dry season. The resulting low land productivity coupled with the limited opportunities for diversification often leads to unsustainable uses. This also applies to limited areas of high productivity, e.g. in the highlands in Eritrea, Ethiopia and Kenya. In both cases, there may be severe degradation, especially when livestock numbers far exceed carrying capacity.

The potential for industrial wood production in large-scale plantations remain limited in many countries. Although there has been notable progress with farm woodlots in some countries, there are significant constraints set by prevailing land and tree tenure in most countries. In some countries, e.g. Eritrea, Ethiopia and Kenya, there has been a breakdown in traditional systems of resource management, while alternative policies and arrangements that encourage long term investment in resource management, including tree growing, are still more or less lacking.

Even in countries with substantial areas of plantations, the efficiency and standard of plantation management has steadily declined and existing plantations are in poor health status and of low product

quality. Stumpage is often manipulated to remain far below open market prices. In many countries, official corruption and lack of accountability in forest revenue collection abound. There is breakdown in law enforcement, and illegal forest activities deprive PFAs of due revenue. Obviously, these limitations must be addressed before PFAs can earn surpluses from forest management.

Low productivity can be addressed through increased investment in research, including tree biotechnology research, as has been shown to pay high dividends in Congo and in South Africa. In addition, many countries can realise increased efficiency in, and economic benefits from, plantation management by engaging other partners, particularly the private sector.

4.4 Ability to fully capture the benefits from management of forests

The fact that there is a wide range of products and services that can be derived from forests is obvious, but PFAs are often not positioned to fully capture these. In most countries, only timber and a few non-wood forest products are valued in trade and income. Many "minor" forest products, such as fuelwood, fodder, bush meat, etc., are exploited by the informal sector, often in an uncontrolled manner. The continued dominant perception of forests as a base for such public goods type of products poses major limitation to PFAs in capturing benefits from their extraction.

Of even greater potential is the capture of benefits from the services provided by forests. The important roles played by trees and forests in stabilising agricultural production (erosion control, windbreaks, soil improvement), water catchment, wildlife habitats, biodiversity conservation, ecotourism, mitigation of climate change, etc., are well recognised but often not taken into account in national and local accounting systems. They represent a significant potential source of additional (also referred to as "innovative") funding for forest management. Such innovative funding sources can go a long way in making PFAs self-supporting.

Unfortunately, most existing PFAs remain uninformed and/or indifferent to the emerging opportunities and lack the capacity to position themselves to fully benefit from these new sources of funds.

4.5 Overall economic viability of public sector forestry institutions

A few forest-rich countries like CAR and Côte d'Ivoire do not only sustain public expenditure from forest revenue but also provide a surplus for other government services. In principle, PFA in such countries should be self-supporting. With improved forest governance, including accounting for forest revenue, several other forest-rich countries could transform their PFA to be self-supporting. Of course, this is assuming that the forests are sustainably managed into the long-term future. For these countries, SFM could pay for itself if necessary policy and governance issues are sorted out.

The majority of SSA countries lack the forest resource base to provide forest revenue sufficient to keep PFAs self-supporting. These countries need to go through alternative forms of transformations in the forest sector to achieve self-supporting PFAs. Within the framework of their on-going macroeconomic structural adjustment programmes, many countries are formulating and/or implementing forest sector reforms generally aimed at transforming their PFAs into more business fashioned organisations which could eventually be self-supporting. For example, Zimbabwe's move pre-dated the on-going transformation efforts in establishing its Forestry Commission in 1955. Ghana established its relatively new Forestry Commission in 1999. Uganda recently created the policy and legal framework for its new Uganda Forest Authority (UFA). Similar moves are on-going in many other countries.

There remain important questions as to whether these more business fashioned PFAs can indeed be self-supporting in the short term. For example, Uganda's newly launched national forest plan (nfp) stipulates that UFA will be self-supporting 4-5 years from establishment. This is highly unlikely given the reality that the country lacks sufficient capacity to start implementing its nfp full speed. Some countries have premised sustainability of their PFAs on revenue from plantations. However, given the current trends of decline in plantation programmes and the fact that PFAs have not proved to be the most efficient outfits for plantation management, it is unlikely that even the new look PFAs can be self-supporting without initial incremental investment in institutional capacity and resource base development.

5. EFFORTS TO ENHANCE EFFICIENCY OF PFAS IN AFRICA – CASE STUDIES

5.1 Decentralisation of forest administration: case study of Uganda

5.1.1 Background

Decentralisation refers to the relocation of administrative functions from central location to lower levels. It differs from the related concept of devolution, which refers to the relocation of powers to lower levels. Trends in adoption of decentralisation and devolution, and their impacts in forest management in developing countries, were the subject of a recent review (*Enters and Anderson, 1999; Onibon et. al., 1999; Lindsay, 1999; Ribot, 1999*). It is instructive to start by examining the driving forces behind the growing interest in decentralisation of forest administration. During an Expert Consultation on Forest Policies in Africa, organised by FAO and CIFOR in Accra, Ghana, in 1995, it was noted that one of the main constraint to SFM was over-centralisation of forest administrations (*FAO, 1996*). It has already been stressed in *section 2.3* that the typical current PFA functions largely through central command and planning. For example, a PFA is typically expected to issue centrally designed management plans together with Technical Orders specifying their modes of implementation. In practice, however, this functioning has long collapsed in most PFAs. Central planning units hardly exist in many countries and forest level management is conducted without due diligence to Technical Orders. In many countries, decentralisation is now regarded as the logical way out of the collapsed centralised functioning.

Another important driving force behind decentralisation of forest administration is the overall government decentralisation strategy for service delivery, like in Senegal, Tanzania, Kenya, Uganda and Ghana. For example, in 1983, Kenya launched its "District Focus Strategy for Rural Development" (based on similar development concepts used in Malaysia). Essentially, these strategies call for cross-sectoral planning and co-ordination of implementation at the district level, as opposed to headquarters. In attempts to fit into such overall national development strategies, forest administration functions became significantly decentralised.

In order to closely examine and learn lessons from past attempts at decentralisation, this study has focused on Uganda for the following case study.

5.1.2 Basic facts about forestry in Uganda

Uganda has some 5 million ha of forests covering about 24% of its land area. The natural vegetation of the country ranges from afro-alpine vegetation on Mts. Elgon and Ruwenzori to dry scrubland in the north-eastern parts of the country. Some 80% of the forests is woodland, 19% is moist high forest, and under 1% is commercial plantations of fast-growing exotic species – mainly of pines and eucalypts. Of the total forest area, some 70% is on private and communal land while the remaining 30% is on government-entrusted protected areas under the Forest Department or the Uganda Wildlife Authority (UWA). The contribution of the country's forest to GDP is around 6.1%, although this does not take into account the crucial services provided by the forests. The forest sector provides the equivalent of 1 million jobs and forest resources are crucial for the rural poor who depend on them for subsistence use. Uganda has recently (2002/2003) introduced new forest policy and legislation, among other things, to cater for the establishment of a business-fashioned Uganda Forest Authority to replace the current Forest Department, and a greater role of the private sector in production and processing of forest products.

5.1.3 History of forest administration in Uganda

Like in other former colonies, the Uganda Forest Department (FD) started operations in the late 1890s. However, it was not until 1921 that Uganda's first white paper on forestry development and the Uganda Forest Act were promulgated. This first forest policy laid heavy emphasis on conservation and sustainable exploitation of the substantial forest wealth, particularly the tropical high forest (THF). In mid 1940s, the FD became significantly strengthened in professional staff capacity. From this period to its independence, Uganda attracted the services of some of the most distinguished forest scientists of the time, ranging from botanists, ecologists, to wood utilisation experts and administrators. In those early periods, Uganda's PFA established distinction on the continent in being guided by solid research.

Upon independence in 1962, there was a sudden reduction in FD capacity with the departure of the many expatriate staff. However, supportive forestry research was partly sustained under arrangements of the former East African Agriculture and Forestry Research Organisation. Forest administration during 1960s remained highly centralised. In the early 1970s, Uganda was plunged into a rogue regime with a disintegration of all sectors society and eventually civil war, for one and a half decades. During this period, the forest administration collapsed and forests were exposed to plunder, largely in the hands of the military elite. After the second liberation by the National Resistance Army (NRA) in the mid 1980s, the country has made commendable efforts to rebuild the society. Thus, the FD was revived and provided with substantial support, particularly by external development partners.

5.1.4 Uganda's attempt at decentralisation

Soon after taking over, the NRA government (which is ruling up to date) introduced some radical changes in the country's governance structure. For example, it introduced the Local Government Statute in 1993 under which development co-ordination became decentralised to the district level (LC3 level). Accordingly, forest management and administration became decentralised to fit the changed general strategy for service delivery. This first abrupt and haphazard decentralisation soon resulted in certain outcomes, which necessitated its immediate review.

During this first attempt at decentralisation, it was realised that many districts lacked technical expertise and financial resources to effectively manage forests. The District Forest Officers (DFO) who had previously relied on FD headquarters for technical orders and financial support were suddenly left alone to "run their own shows" in the district, with little reference to FD headquarters. It turned out that many of them had long forgotten forest management planning procedures and practices. They simply could not cope with the sudden professional challenges and succumbed to following suggestions by other district leaders. This in turn exposed them to manipulation by the district leaders, some of whom were powerful functionaries in the NRA government. This manipulation became more intense when the government further decided that all district-based FD staff be paid from district treasuries. Suddenly, FD headquarters lost control of what was happening at the forest level within the districts. All these developments culminated in a run away situation where corruption and other forms of illegal forest practices became decentralised to the district level. Forests became open to plunder and the trend was going back the previous period of the rogue regime. The negative situation developed so suddenly and at such an alarming scale that the government retracted its decision after two years and restored authority and control to FD headquarters in 1995.

5.1.5 Second attempt at decentralisation

After retracting its first decentralisation plans, Uganda has made exemplary progress with policy and institutional reforms in the forest sector, which can provide a better platform for decentralisation. In 1995, the country adopted a new constitution, which, among other issues, is more explicit on overall governance structures providing for devolution of powers to the district level. Furthermore, the new Local Government Act of 1997 provides the legal framework for decentralisation and allows devolution of powers to the districts and to lower levels of councils of government. The country has also introduced a new Land Act of 1998 providing for better regulation of land tenure and management of natural resources throughout the country. But above all, Uganda has, between 1999 and 2002, succeeded in introducing forward-looking forest policy, forest legislation and a national forest plan which stipulate, among other things, orderly decentralisation of its PFA. The new policy and legislation are clearer about responsibility for managing the nine forest conservation areas of the country. The responsibilities of the newly created National Forest Authority (NRA) and its functional links with local governments are now specified.

5.1.6 Lessons from Uganda's decentralisation

Uganda's first attempt at decentralisation was launched during a period when the NRA was "experimenting" with overall decentralisation and devolution of powers. The then new government had the huge challenge of reconstruction the public administration in all sectors and was pursuing its political campaign promise to devolve powers to local government councils. Thus, decentralisation of the forest administration was but a part of a bigger move to devolve powers to local councils.

The first attempt at decentralisation was introduced at a time when the then central PFA had nearly collapsed. It picked up from nothing. It was opportunistic in many ways and had little historical inertia. It arose out of unique circumstances in that country, which are unlikely to be realised in other countries.

Perhaps the most important lesson was how fast forest management can degenerate if decentralisation is introduced in the absence of enabling policies and legislation. Uganda very quickly learnt from inappropriate actions in the first decentralisation attempt, retracted, and then laid an appropriate ground for a second attempt, which is on-going.

The strong tradition of centralised PFAs can breed professional laxity among field staff. PFA field staff was so used to implementing orders from above that they had lost the professional challenge and ability to guide forest management in a decentralised mode. There is obviously great need for capacity building at the field level ahead of decentralisation.

5.2 Establishment of forestry commissions, boards and corporations: case study of the Zimbabwe Forestry Commission

5.2.1 Background

In SSA, Zimbabwe has the longest history of its PFA as a commission. To date, the Zimbabwe Forestry Commission (ZFC) serves as a showcase and model with some countries attempting to restructure their PFAs using the model. For example, since 1990s, Côte d'Ivoire, Ghana, Uganda and Sudan, have introduced institutional reforms and transformed their PFAs into commissions, authorities or corporations with similar operational strategies. However, it needs early recognition that Zimbabwe stands unique among SSA countries in having had close development ties with South Africa where the bulk of forestry production is in the hands of the private sector. Indeed, until independence in the early 1980s, the ZFC was significantly influenced by South Africa forest policies. In this regard, its model may not be of best fit in other countries with very different social and political circumstances. But, as elaborated below, the evolution of the ZFC presents many important lessons on attempts by a PFA to balance optimal forest production with social dimensions.

5.2.2 History of the commission

The State Forestry Service in Zimbabwe was established in 1920 within the Department of Agriculture. The first comprehensive forest policy and legislation were introduced in 1948. In 1954, the ZFC was established as a parastatal organisation in the Ministry of Environment and Tourism (*Bradley and McNamara*, 1993). The Commission was charged with dual, and rather conflicting, functions, which have remained a big challenge to date, namely (i) to run the forestry enterprise in a business-like fashion, and (ii) to provide regulation in a growing forest sector. The ZFC immediately embarked on developing plantations of fast-growing exotic species, mainly pines and eucalypts. By mid 1970s, it had established some 120,000 ha of well managed plantations. The Commission also established efficient wood processing plants in various forest regions.

5.2.3 Focus on social dimensions

As independence was gained, it was recognised that while the ZFC registered great successes on the forestry enterprise front, it was wanting on social dimensions. For example, in its early days, the Commission paid very little attention to forestry development in the homelands, which constituted some 30% of the area under its control. It had no extension service of its own and had only weak working links with the Department of Agriculture, Technical and Extension Services (AGRITEX). It was in recognition of this deficiency that the ZFC launched Forestry Extension under its Rural Afforestation project in 1983.

In 1987, the ZFC started on a process of internal restructuring aimed at ensuring that the social dimensions are fully integrated into its core objectives and programme. These efforts were re-enforced by the Communal Land Forest Produce Act of 1987. An external review in 1991 (supported by the World Bank) made some important recommendations on how the commercial and state sections of the ZFC should be further streamlined (*Bradley and McNamara*, 1993), which the government is trying to implement to date.

Taking into full account the new changes in socioeconomic and political aspirations, the ZFC embarked on a process of internal restructuring in 1987. In this process, activities have been broadened to be responsive of the needs of the majority of the people. Thus, it has retained a revitalised commercial section to cater for plantation development, timber processing, marketing and corporate planning. In addition, a smaller state section of the ZFC has been established, consisting of a Forest Extension Services Division, an Indigenous Resources Division, and a Research and Development Division.

The Commission continues with its dual objectives of business competitiveness in its commercial section and provision of public goods/welfare in its state section. However, there are continuing suggestions and pressures from some quarters that the commercial section should be separated and run as a company and things could change in the future. To date, the ZFC has been a showcase of delivery on its commercial objectives. It has also proved robust when faced with drastic socioeconomic and political changes through timely adjustments.

5.3 Privatisation and commercialisation of forest plantations: case study of industrial plantations in Kenya

5.3.1 Background

Many SSA countries have faced major difficulties in sustaining their once dynamic forest plantation programmes and are taking steps to privatise and/or commercialise the programmes. For one thing, the once effective "taungya" system of plantation development practiced in countries like Kenya, Ghana and Nigeria, has turned into a major source of conflict between PFAs and local populations demanding a fair share of benefits from the plantations. For example, in Kenya, such conflicts have compelled the government to prohibit food growing in gazetted forests and to remove the resident labour force from the forest estate thereby bringing the plantation programme to a near halt. For another thing, many governments have recently adopted macroeconomic development policies, which require governments to divest from some functions which could be more efficiently accomplished by other agencies, including the private sector. In several countries, forest industrial plantations have been included in this group requiring government divestiture. In such developments, PFAs should only provide policy and oversight for plantation programmes in the hands of other actors.

In principle, privatisation or commercialisation appear to be the most logical options out of the present stagnation with plantation programmes. A few countries have already made commendable progress in that direction. One is Côte d'Ivoire, which, in 1992, transferred all commercial forest functions of its previous PFA (including plantations) into a Forest Development Corporation (SODEFOR). In practice, however, many countries with the intention to privatise or commercialise are caught up in a muddle of social, policy, and economic complications, which are proving difficult for governments to resolve. Kenya is a good example of a country that developed a substantial forest plantation base and which has been seriously exploring options for privatising its plantations. It may serve as a good platform for learning lessons in such developments.

5.3.2 Brief description of the plantation programme

Kenya's limited existing forest resources are threatened by accelerated deforestation, increasing demand for forest products, low productivity of forest plantations, inefficient use of raw materials and underdeveloped markets for farm forest products. The country is faced with a serious widening gap between supply and demand for forest products and services. For example, going by the current trends, the area covered by indigenous forests in gazetted government forests has been projected to decline from the current 1.17 million ha down to some 0.93 million ha by the year 2020 (*Kenya Forestry Master Plan, 1994*). Up to 1980s, Kenya was exemplary in development of plantations of fast-growing trees. During the last two decades, however, the plantation programme has collapsed and the area under plantations has sharply declined, from 164,000 ha to 79,000 ha. As a result, many forest industry enterprises have closed down and/or relocated to other countries. The remaining industries are operating with great uncertainty. With the disappearance of forests, the livelihoods of rural poor populations are seriously threatened.

There are serious concerns with the current trends in the forest sector and the status of the forests in Kenya today. The forest policy adopted back in 1968 and the relevant legislation are considered outdated and inadequate to cope with present development challenges. For nearly a decade, attempts at

policy and legislation reforms were unsuccessful. The Forest Department, the Government of Kenya (GoK) agency charged with the responsibility of public forest administration, remains much maligned and seriously limited in its mandate to conserve and to manage forests and to regulate development in the forest sector. Indeed, the recent wholesale purge on the department has cast doubts on its credibility and threatens to make the department irrelevant. The Ministry of Natural Resources and Wildlife (MENRW) has recently developed a new policy and legislation which encourage the participation of other players including individual farmers, communities, and the private sector to participate in forest management and conservation.

5.3.3 National forest plan

The Kenya Forestry Master Plan (KFMP), first published in 1994, recommended restructuring the Forest Department involving the establishment of a Kenya Forestry Board as a parastatal body, largely to manage the industrial plantation forest estate (IPFE) within gazetted forest areas in a business fashion. This was also the recommendation made for several other African countries. However, this recommendation did put GoK in a macro-economic policy dilemma given its overarching policy to divest from parastatals. Moreover, it was the general strategy in the on-going economic structural adjustments that the government should withdraw from direct production enterprises (such as in IPFE) and instead create an investment climate for other players with comparative advantage.

5.3.4 Privatisation of plantations

In 1997, GoK commissioned the Price Waterhouse firm to review the situation and to prepare a report on "Reorganisation of management of industrial plantations and restructuring options for the Forest Department". Essentially, this report recommended a move to set up a "Plantation Company" to manage IPFE under contract with the government. The report also recommended that the government should lease IPFE land to other players after an initial "repair" period. The previous government did not react positively to the first recommendation above, partly because of its perceived bias on foreign bidding and possible control. On the other hand, the previous government did not express objection to the leasing option. The current GoK administration has recently revived debates on these policy and institutional reforms for a more vibrant forest sector.

5.4 Devolution of natural forest management to communities: case study of Duru-Haitemba forest in Tanzania

5.4.1 Background

Like in most SSA countries, Tanzania's forestry administration operates on a centralised model with all decisions and implementation plans vested in the Director of Forestry and Beekeeping. But unlike many other countries, Tanzania has had a long history of decentralised government. For example, the Villages and Ujamaa villages Act of 1975, the District Authorities Act, and the Local Government Act of 1982 provide for significant decision-making responsibilities at local levels. At the lowest level, village councils do make bylaws which are fully recognised in law (*Kihiyo and Kajembe, 2000; Kajembe et al., 2000*). Moreover, during the past decade, the Division of Forestry and Beekeeping has launched pilot Community Based Forest Management (CBFM) in various parts of the country. The growing interest in CBFM and the legal provisions for decision-making at local levels provide unique platforms for chance devolution of natural forest management to eight communities the in the 9,000 ha Duru-Haitemba village forest reserve (*Wily, 1996; Kajembe et al., 2003*).

5.4.2 Genesis

The Duru-Haitemba forest had been targeted for gazettement into a government forest reserve, being one of the few intact Miombo forests in the region. Thus, in 1992, the forest was inventoried, surveyed and its boundaries demarcated in preparation for gazettement (all this was accomplished with support from a Sida-funded regional forestry programme). However, there was stiff resistance by the local communities to the proposed gazettement. Instead, the communities made a proposal for a CBFM venture, which subsequently gained acceptance by both the government and the Sida supported programme.

5.4.3 Setting up a structure for local forest administration

The government abandoned its gazettement plans and, instead, encouraged local communities to develop an appropriate local administration structure for management and conservation of the forest. The Babati District Forest Officer (DFO) merely continued to offer technical advice to the communities as they elaborated their own administration and management plans. Indeed, the stance taken by that particular DFO to refrain from the traditional control and command approaches in dealing with communities contributed significantly to the success of the devolution process.

With assistance from the DFO and staff of the Sida-funded programme, the villages demarcated forest areas to be under their management responsibilities and developed credible management plans. The communities established village forest committees (VFC) to oversee the implementation of management plans. The management plans and associated rules were the subject of specifically introduced village bylaws. In mid 1995, all the village management plans and rules had been harmonised and collectively approved by the full Babati District Council under the District Authorities Act. At the district level, specific bylaws were introduced to cater for management and conservation of the whole forest. Under the local arrangements for forest administration, the village is officially the authority and manager of the part of the forest under their responsibility. The government DFO and forest guards have much reduced roles of technical advice and support for law enforcement.

5.4.4 Capacity building

The important roles played by the DFO and the Sida-funded programme in capacity building for effective forest administration among the local communities cannot be overemphasised. In the initial stages, some communities remained ambivalent to reluctant. Government officials also expressed serious concern about the capacity of the villagers to manage and to conserve the forest. However, upon concerted capacity building at the village level, the forest has benefited from improved management to this day.

6.0 LESSONS LEARNT ON THE PERFORMANCE OF PFAS

6.1 Lessons from success stories of changes in forest administration

With the great diversities among SSA countries - in forest resources, structure and stature of PFAs, political stability and aspirations, and socioeconomic development status - there exists great diversity of experiences with PFA performance. There are many valuable lessons of both successes and failures to be learnt from this. Through desk and case studies, some success stories on changes in forest administration can be highlighted below. However, it is important to add a caution here, viz. that the study did not conduct any in-country visits and interviews to confirm actual status of PFAs in all the countries. Thus, there may be misrepresentations of some country situations. In the summary of lessons below:

Relevance of PFAs. Most countries recognise the great importance of their forest resources for ecological stability and socioeconomic development, and they have sustained their PFAs right from colonial periods. During the last decade, there have been promising highest level political commitments to SFM and to strengthening PFAs in many of countries. While these commitments have yet to be turned into actions, they indicate increasing recognition of PFAs and their functions. Accelerated deforestation and desertification are catalysts in this spiral of recognition. Clearly, PFAs remain relevant.

PFAs' capacities and effectiveness. Drastic staff reductions, resulting from economic structural adjustment programmes, have dealt debilitating blows to PFA capacities in most countries during the last two decades. Moreover, the new paradigm for SFM has ushered in new functions for PFAs, the capacity for which does not exist. In many countries, the HIV/AIDS scourge has further reduced PFA capacity.

The low PFA capacity combined with the mushrooming official corruption and rampant illegal forest activities have rendered PFAs ineffective in many countries. However, some governments are taking

action to curb corruption in this and other sectors. For example, in Kenya, the government has recently suspended all middle and senior staff of the Forest Department for screening against corruption.

Institutional profile. Compared to other government agencies, PFAs have remained lowly placed in government priorities and hierarchies. This has remained the case even in forest rich countries like CAR, Côte d'Ivoire and Gabon, where governments benefit from huge forest incomes. In many countries, operations of PFAs have been frequently destabilised through transfers from one government ministry to another. PFAs continue to suffer from undue interferences from higher levels of governments, particularly from presidential decrees and orders to offer state largess.

However, some recent developments among the countries in Central and West Africa (partner countries in CEFDHAC and the Congo Basin Initiative) have great potential to catapult PFAs to the front, through high-level regional political commitments.

Restructuring PFAs. Many countries have made commendable progress in forest policy and legislation reforms and have formulated new look national forest programmes featuring these reforms. In a few countries, these developments have resulted in restructured PFAs. Good examples are to be found in Uganda where the former Forest Department has been transformed into a more business oriented Uganda Forest Authority, and in Ghana where the former Forest Department has been transformed into the Ghana Forestry Commission. Many more countries are at varying stages in similar restructuring.

Decentralisation of PFA functions. In a few countries, centralised PFAs stand out as great misfits as governments have devolved governance. For example, recent changes in government structure (devolution) in Ethiopia have rendered the centralised PFA almost non-functional. Other countries, like Uganda, Ghana and Tanzania, are taking proactive steps to decentralise their PFAs in a more orderly manner within the frameworks of new constitutions and relevant legislations.

However, these attempts at PFA decentralisation have often impacted negatively on forest management. In general, local administrations have shown little commitment to SFM and have very limited technical capacity. Local level capacity building ahead of PFA decentralisation is a critical requirement.

Devolved PFAs. Many countries are promoting collaborative forest management and community based natural resources management initiatives. While some of these are donor-driven, there are good examples of home grown ventures like the Duru-Haitemba Forest (Tanzania) and the Bwindi Forest Trust (Uganda), which are functioning well with little control from central PFAs. As these take root and prove viable, they establish the foundation for devolved PFAs.

Commercialisation of production functions. Most countries now recognise that PFAs are not the ideal agencies to be responsible for commercial forest production and marketing. The Zimbabwe Forestry Commission is a notable exception. Productivity and quality of plantations managed by PFAs continue to decline in most countries. While many countries have recently introduced macroeconomic development policies, which encourage the participation of the private sector, there are important limitations particularly with the long gestation periods and land tenure. On balance, the Zimbabwe PFA model may be the most desirable from the standpoint of commercialisation of production functions.

Resource mobilisation for SFM. There are two key issues with regard to PFA resource mobilisation for SFM, viz.: (i) forest income is often not ploughed back directly in support of SFM, and (ii) PFAs are accorded low priority in government allocations. A few countries, like Tanzania, which have recently introduced forest income retention schemes, are already reporting successes in improving forest management. This is a promising avenue for other countries. With regard to the second issue of low government allocation, there is significant potential for PFAs to realise higher contributions through more effective elaboration of the roles of forest sector activities on the overall poverty reduction strategy plans.

6.2 Conditions that facilitate institutional reform and improved performance

It is instructive to examine the conditions that have facilitated PFA reforms and improved performance in the few countries that have been able to achieve these. In some countries, such as Malawi, Uganda and Ghana, PFA reforms have been facilitated significantly through donor-supported projects. A few have been transformed through presidential decrees. The majority are, however, undergoing gradual transformation as propelled by the newly introduced national forest policies and legislations or in

response to overarching new national macroeconomic policies. The following can be highlighted as the main conditions, which have facilitated reforms:

Regional and international consensus and agreements. In general, TFAP-driven country processes of the mid 1980s and early 1990s achieved little in reforming and improving the performance of PFAs. Most countries failed to implement the resulting forest master plans. In contrast, a few countries are responding positively to the UNCED/IPF/IFF/UNFF recommendations, particularly in embracing national forest programmes/plans (nfps) as the framework and vehicle for SFM. Accordingly, many countries are making good progress on the nfp process, particularly on the foundation policy and institutional reforms. One of the expected results from nfp processes will be new look PFAs as already realised in Uganda, Mozambique and Ghana. On this score, some regional initiatives like that of the African Academy of Sciences (AAS) capacity building for nfp programme, have played significant roles in helping some countries to internalise the recommendations from the continuing global dialogue on forests.

Improved governance. The governments of many countries are introducing and/or entrenching more democratic forms of governance with enhanced accountability. A few countries have gone further to introduce specific anti-corruption measures that are likely to improve the performance of PFAs. On a regional scale, the budding AFLEG has great potential to improve PFA performance in participating countries.

Changes in forest policy and legislation. There is international consensus that the starting point for the nfp process is forest policy and institutional reforms. Many SSA countries have been sensitised on this requirement and have initiated or adopted new forest policies and legislation. The legislation is guiding the transformation into new look PFAs as in Ghana, Uganda and a few other countries.

Revenue retention schemes and forest funds. A few countries have already established forest income retention schemes for direct support for improved forest management. A few countries, like Uganda, have moved a stage further in establishing a national forest fund and trust funds for specific forests. These avenues for mobilising additional resources have great potential to improve on-site forest management and to relieve pressure on the overstretched PFAs.

6.3 Replicability of the experiences

While it is useful for countries to share and benefit from some of the above PFA experiences, care must be taken to assess how applicable and how suitable they may be in specific country situations, i.e. their replicability across countries. There are great differences among SSA countries in their forestry development challenges and options. For PFAs to remain relevant, they must be fashioned for efficient delivery in the context of the country's specific challenges and options. Countries with very similar biophysical conditions and forest resources may need to adopt different PFA models depending on their specific political and socioeconomic development aspiration. But some PFA experiences may be replicable, including the following:

Improved governance. In most countries, PFAs have been seriously weakened through high-level political interference and official corruption. Furthermore, PFA functions have been severely limited by civil wars in counties like Liberia, DRC and Sierra Leone. Clearly, improved governance as a prerequisite for well-functioning PFAs is an experience, which is applicable across countries.

Policy and institutional reforms. Most countries have recognised that they had outdated forestry policy and institutions and have initiated reforms. Moreover, there is international consensus that these reforms should also address UNCED-IPF-IFF-UNFF recommendations, particularly within the nfp framework. Suffice it to stress that an nfp framework ushers in some new roles and responsibilities for PFAs. Experiences on these recent developments are replicable in all counties.

Resource mobilisation. There are clear indications that forest income retention schemes and establishment of forest funds will strengthen PFAs and improve forest management in all the counties. Experiences in this regard will be highly replicable.

Separation of PFA functions. Both forest-rich countries and countries which have, or plan to develop, substantial plantations have recognised the need to separate the public goods PFA functions from production and commercial functions. In principle, this is in line with the new macroeconomic development policies of most countries. Although rather unique in its evolution, the Zimbabwe Forestry Commission model would be the ideal for such countries. However, there are various country

specific bottlenecks in adopting this model. Perhaps the move, in some of the countries, in establishing autonomous and businesslike forest authorities, services or commissions is the first step towards the ideal model. This first step is replicable across countries.

PFA decentralisation/devolution. The case studies on PFA decentralisation (Uganda) and devolution (Duru-Haitemba in Tanzania) emphasise the very specific circumstances in which these have been implemented. Moreover, there is need to study their impact for a longer period to learn sound lessons. Both are clearly not replicable across countries.

7.0 SUMMARY OF FINDINGS AND RECOMMENDATIONS

7.1 Main findings

The following are the main findings of this study:

- In terms of their structure and functioning, most PFAs have remained uniquely conservative in the
 face of great social and political changes in respective countries. Many still hold on to structures
 and modes of operations established during the colonial period. However, from the 1990s, a few
 countries have made commendable efforts in introducing policy and institutional reforms with
 major changes in PFA structure and functions.
- PFAs of most SSA countries are weak in their capacities to effectively plan and implement national forest programmes. During the last two decades, PFA capacities have sharply declined, largely as a result of the overall economic structural adjustment programmes. This decline has occurred during the period when forest management tasks are becoming more challenging with accelerated deforestation and illegal forest activities in many countries. In some countries, the performance of PFA has been so low that their relevance is now questioned.
- In virtually all SSA countries, PFAs are maintained as low profile government agencies. This is the situation even in forest-rich countries like Gabon, CAR and DRC, where income from forest contributes significantly to the national budgets. Even the great political hype about forests arising from UNCED and the continuing global dialogue has apparently had little impact on the profile of PFAs in SSA countries. The big problem with this low profile status is that forestry attracts little government resources.
- In many countries, PFAs face rapidly growing illegal forest activities and official corruption. In a few countries, this has developed into a situation out of control where forest law enforcement is no longer tenable. As a direct result, the esteem for PFA staff has waned and public support eroded. Urgent steps are needed to curb corruption. In this regard, the regional initiative AFLEG offers great potential in addressing illegal forest practices, particularly those of cross-boundary scale.
- Many countries are planning and/or implementing PFA transformations aimed at separating the
 public goods PFA functions from production and commercial functions. The general trend is to
 transform forest departments into more businesslike forest services, commissions or authorities.
 However, it is still too early to assess the effects of these transformations on forest management.
- In a few countries, there have been recent efforts to decentralise and/or to devolve PFA functions.
 In some countries, these developments have been brought about by overall devolution of governance. In these efforts, it has been recognised that PFA decentralisation or devolution ahead of capacity building to the local level leads to increased forest mismanagement.
- There is huge variation between countries in respect of wealth in forest resources and in socioeconomic development aspirations. PFAs should be fashioned according to the country's specific forestry development challenges and potentials. Replicability of PFA experiences across countries should not be taken for granted. However, all the countries need to make a start on policy and institutional reforms, which will guide decisions on new PFA structures and functions and which will lay the foundation for formulating and implementing sound national forest programmes.

7.2 Recommendations

Out of the findings of this study, the following recommendations are made for guidance on the way forward:

- Countries should take appropriate steps to stabilise and strengthen their PFAs through improved governance. In particular, steps should be taken to minimise ministerial transfers, political interference and corruption. In these respects, countries need to embrace emerging initiatives like AFLEG.
- Countries need to elevate the national profiles of their PFAs commensurate with the crucial roles forests play in national development. This could be achieved through better national accounting for the contribution of forest products and services to GDP and through high level policy advocacy. There is great potential for the emerging NEPAD forestry action plans to support these developments, largely through existing sub-regional organisations such as the African Timber Organisation (ATO), the Economic Community Of West African States (ECOWAS), the Permanent Inter-States Committee for Combating Drought in the Sahel (CILSS), the Inter Governmental Agency for Development (IGAD) and the Southern African Development Community (SADC/FSTCU).
- Immediate steps should be taken to mobilise additional resources for PFAs through forest income retention schemes, national forest funds or trusts and through collaboration with NGOs and the private sector.
- There is urgent need for continental and/or regional initiatives on capacity building for PFAs. In particular, there is need for such initiatives to help the countries evaluate the appropriateness of the UNCED-IPF-IFF-UNFF recommendations and to help the countries kick start sound national forest programmes. It is in these lines that the relevant programmes of the African Academy of Sciences, NEPAD and other continental and regional organisations could play important roles.

REFERENCES

Adeyoju, S.K., 1981. Agroforestry and forest laws, policies and customs. In Proceedings of Agroforestry for Humid Lowlands workshop. United Nations University/International Development Research Center.

African Forestry and Wildlife Commission, 1995. Report of the 10th Session the African Forestry and Wildlife Commission (AFWC). Sanbonane, South Africa.

Anderson, J., J. Clement and L.V. Crowder, 1998. Accommodating multiple interests in forestry. *Unasylva Vol. 49 No. 194 (3)*, pp 3 – 10.

Boffa, J.M., 2000. West African agroforestry parklands: keys to conservation and sustainable management. *Unasylva Vol. 51 No. 200.* pp. 11 – 17.

Bradley, P.N. and K. McNamara, 1993. Living with Trees: Policies for Forestry Management in Zimbabwe. Prepared with the assistance of the Stockholm Environment Institute. World Bank Technical Paper No. 210. 329p.

Daniels, S. and G. Walker, 1997. Rethinking public participation in natural resources management: concepts from pluralism and five emerging approaches. Paper prepared for the Workshop on Pluralism and Sustainable Forestry and Rural Development. FAO, Rome, Dec. 1997.

Dykstra, D.P., G.S. Kowero, A. Ofosu-Asiedu and P. Kio, 1997. Promoting Stewardship of Forests in the Humid Forest Zone in Anglophone West and Central Africa. Final Report Chapter 7. UNEP/CIFOR.

Enters, T. and J. Anderson, 1999. Rethinking the decentralization and devolution of biodiversity conservation. *Unasylva 199, Vol. 50*, pp. 6-11.

FAO, 1950. Forest policy, law and administration. FAO, Rome.

FAO, 1978. The Jakarta Declaration of the 8th World Forestry Congress. FAO, Rome.

FAO, 1985. Tropical Forestry Action Plan. Committee on Forest Development in the Tropics. FAO, Rome.

FAO, 1996. Forest Policies of selected countries in Africa. FAO Forestry Paper No. 132. FAO, Rome. 566p.

FAO, 2001a. The forest revenue systems and government expenditure in forestry in 32 country reports. Forest Finance Working Paper series. FAO, Rome.

FAO, 2001b. State of the World's Forests 2000. FAO, Rome.

FAO/FRA, 2001. FAO Forest Resources Assessment Report 2001. FAO, Rome.

FAO, 2003. The State of World's Forests 2003. FAO, Rome

FAO Regional Office for Africa, 2002. The State of Forests and Wildlife in Africa. African Forestry and Wildlife Commission. 80p.

FAO/SIDA, 1983. Rome Consultation on Forest Administration for Development. FAO, Rome.

FOSA, 2002. Forestry Outlook Study for Africa Report. The African Forestry and Wildlife Commission and FAO.

Hill, K.A., 1992. The Effectiveness of National Forestry Administrations in Africa. *International Review of Administrative Sciences* 58 (2): 163-174.

Husch, B., 1987. Guidelines for forest policy formulation (Section 4: Administration). FAO, Rome.

Kajembe, G.C., G.C. Monela and Z.S.K. Mvena, 2003. Making community-based forest management work: a case study of Duru-Haitemba village forest reserve, Babati, Tanzania. In G. Kowero, B. Campbell and R. Sumaila (Eds): Policies and governance structures in woodlands of Southern Africa. CIFOR, Bogor, Indonesia.

Kameri-Mbote, A.P. and P. Cullet, 1997. Law, Colonialism and Environmental Management in Africa. In Environmental Management in Africa. Volume 6 Issue 1. Blackwell Publishers Ltd. pp. 23 – 31.

Kayambazinthu, D., F. Matose, G. Kajembe, and N. Nemarundwe, 2003. Institutional arrangements governing natural resource management in the miombo woodland. In G. Kowero, B. Campbell and R. Sumaila (Eds): Policies and governance structures in woodlands of Southern Africa. CIFOR, Bogor, Indonesia.

Kihiyo, V.B.M.S. and G.C. Kajembe, 2000. The Tanzanian Ujamaa Policy: Its impact on Community Based Forest Management. In Gombya-Ssembajjwe and A.Y. Banana (Eds.): Community Based Forest Resource Management in East Africa. Makerere University, Kampala, Uganda. pp 34 – 45.

King, K.F.S., 1969. Modernizing institutions to promote forestry development. *Unasylva No. 95 Vol. 23 (4)*.

Lindsay, J.M., 1999. Creating a legal framework for community-based management: principles and dilemmas. *Unasylva 199, Vol. 50*, pp. 28-34.

Ljungman, L., 1994. The changing roles of forestry institutions in former centrally planned economies of Eastern Europe. *Unasylva 45 (178)*, pp. 20-30.

MacDevette, M.G., 1996. Partnerships between local governments, central governments, NGOs and private sector for local environment management. MELISSA programme, World Bank Country Office, Hatfield, Pretoria, South Africa.

Mandondo, A., 2000. Situating Zimbabwe's Natural Resource Governance Systems in History. Centre for International Forestry Research (CIFOR) Occasional Paper No. 32. CIFOR. Bogor, Indonesia.

Miranda, M.L., O.M. Corrales, M. Regan and W. Ascher, 1992. Forestry institutions. In Sharma N. P. (ed.): Managing the world's forests: Looking for balance between conservation and development. Kendall/Hunt, Debuque, pp. 269 – 299.

Mohai, P. and P. Jakes, 1996. The Forest Service in the 1990s: Is it headed in the right direction? *Journal of Forestry* 94(1):31-37.

Nkhata, D., 1997. The status of forest resources management and its problems in Zambia. Paper presented at the XI World Forestry Congress, Antalya, Turkey, 13-22 October, 1997.

O'Hara, P., 2002. Community forestry – Liberation through scaling down our failures. *Forests, Trees and People Newsletter No.* 46:46-53.

Okoth-Ogendo, H.W.O., 1990. The law in relation to land use practices in Kenya. In Proceedings of the 1st Kenya national seminar on agroforestry. ICRAF, Nairobi.

Onibon, A., B. Dabire and F. Ferroukhi, 1999. Local practices and the decentralization and devolution of natural resource management in French-speaking West Africa. *Unasylva 199, Vol. 50*, pp. 23-27.

Owino, F., 1990. Forestry policy imperatives under conflicting land use pressures: a case study of Kenya. In F. Schmithusen (ed.): Forest legislation: Report of the IUFRO Working Party S4.08.03. ETH Zurich, pp. 229 – 236.

Pettenella, D., 1997. New trends in forest administration. Paper presented at the XI World Forestry Congress, Antalya, Turkey, 13-22 October, 1997.

Ribot, J.C., 1997. Participation without representation: Chiefs, Councils and Forestry Law in the West African Sahel. Paper presented at the XI World Forestry Congress, Antalya, Turkey, 13-22 October, 1997.

Ribot, J.C., 1999. Accountable representation and power in participatory and decentralized environmental management. *Unasylva 199, Vol. 50*, pp.18-22.

Shackleton, S. and B. Campbell, 2001. Devolution in natural resources management: institutional arrangements and power shifts: A synthesis of case studies from southern Africa.. CIFOR, Bogor, Indonesia. 80p.

Sjoholm, H, and S. Luono, 2002. The green forest pastures of Suledo – Maasai community organize to save the forests and secure livelihoods. *Forests, Trees and People Newsletter No. 46:13-20.*

Sukadri, D.S., 1997. A prototype expert system model for assessing forest management policy. Paper presented at the XI World Forestry Congress, Antalya, Turkey, 13-22 October, 1997.

Transparency International, 2001. Country Corruption Profile Report. Nations Newspaper, Kenya. 28th June 2001.

Wily, L.A., 1996. Community Based Natural Forest Management: The case of Duru-Haitemba and Mgori Forests in Tanzania. World Bank/UNEP Africa Forestry Policy Forum. Nairobi, Kenya. pp 19.

Wily, L.A., 2000. Forest law in eastern and southern Africa: moving towards a community-based forest future? *Unasylva Vol. 51 No. 200.* pp. 19-26.

Wily L.A., 2002. The political economy of community forestry in Africa – Getting the power relations right. *Forests, Trees and People Newsletter No. 46:4-12.*

ANNEXE. STRUCTURAL ORGANISATION AND RESPONSIBILITIES OF PFAS IN SELECTED AFRICAN COUNTRIES

Country	PFA establi	shment	PFA capacity (human resources)	Principal responsibilities
Bénin	Functions within Ministry of Agriculture, Wildlife and Fisheries			Formulation and implementation of forest policy
	Department Resources	of Forestry and Natural	Prof. staff - 56 Techn. staff - 590 General adm 80	Conservation of natural resources Support for community participation in natural resources
	Related govt. agencies	Centre National de Gestion des Réserves de Faune (CENAGREF)	Prof. staff - 9	management Management of nature reserves
		Office National du Bois (ONAB)	Prof. staff - 6	_
Congo	Economy National For Divisions and General 11 Regional 56 Forest Br Related govt. agencies	Centre National d'Inventaire et d'Aménagement des Ressources Forestières et Fauniques Service du Contrôle des Produits forestiers à l'exportation Unité spécialisée de lutte antibraconnage		Formulation and implementation of forest policy Conservation of forests and natural resources Supervision of trade in forest products
Mali	National De Conservation		for Nature of forest policy Conservation of natural resources	Conservation of natural
	Regional Conservancies Forest Brigades			participation in management of natural resources
	Related Services de govt. Conservation de la Nature			Management of nature reserves

		Antennes de Conservation de la Nature		
Rwanda	Functions within Ministry of Lands, Environment, Forests, Water and Natural resources Forest Department Department of agriculture and wildlife Field forest brigades			Forest policy development Conservation of natural resources
			Prof. foresters - 2 Prof. support - 1 Techn. staff - 3 Prof. forester - 1 Prof. support - 1	Support for community participation in management of natural resources Management of nature reserves Management of national parks.
			Techn. staff - 8 Each of the 6 districts has one technical level staff.	
	Related govt. agencies	Office Rwandais du Tourisme et des Parcs Nationaux (ORTPN)		
Sénégal	Functions with Environment	hin Ministry of		Forest policy development Conservation of natural
	Division of Water, Forest and Soil Conservation			resources Support for community
		stry Commission		participation in tree planting and forest conservation
	Regional fores	st brigades		Torest conservation
	Community-b	ased forest staff		
	Related govt. agencies	Ecological Monitoring Centre		
Togo		hin Ministry of and Forest Resources	Prof. foresters - 4 Techn. staff - 2	Policy co-ordination
	Department of	f Water and Forests	Prof. staff Techn. staff - 4	Forest policy formulation and implementation
	Department of	f Wildlife and Hunting	No senior staff Prof. staff - 5	Wildlife policy formulation and implementation
	Department of	f Environment	Prof. staff - 6	Environmental assessment and management
	Finance and A	Administration	No senior staff Middle level staff - 4	General administration
	5 Regional bri	gades	Techn. staff - 6	Forest management and protection
	Related govt. agencies	ODEF Société d'état chargée de la gestion des plantations d'Etat (ODEF)	Prof. staff - 6 Techn. staff - 2	

Organe d'appui au Ministère chargé d'exécuter les missions qui lui sont confiées (PNAE)	1 senior staff	
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