### **Review of Public Forestry Administrations and Related Institutions in Sub-Saharan Africa**

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#### Abstract

The main findings of a study on forest administration and related institutional arrangements (PFA) are highlighted. The relevance and changing roles of PFA in Sub-Saharan African (SSA) countries are covered in the context of new paradigm for sustainable forest management (SFM). The current weak capacities and low profiles of PFA in SSA countries are addressed and some recommendations are made on actions for positive changes. It is recommended that SSA countries should take appropriate steps to stabilize and strengthen their PFAs through improved governance and to actively participate in the emerging initiative on African forest law enforcement and governance (AFLEG). It is recommended that SSA countries should take immediate steps to mobilize additional resources for PFAs through forest income retention schemes, national forest funds/trusts and through collaboration with non-governmental organizations (NGOs) and the private sector. It is also recommended that SSA countries should mobilize resources through continental and/or regional initiatives on capacity building for PFA.

*Key words:* Sustainable forest management, public forest administration, capacity building, national forest programmes, improved governance

#### Background

Like in other parts of the developing world, there is concern that public forestry administration and related institutions (PFA) in Sub-Saharan Africa (SSA) countries are not effectively addressing the challenges of sustainable forest management (SFM). For example, global 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 attempted 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 PFA.

The protracted international dialogue on forests, which started with Rio Earth Summit (UNCED, 1992) and has continued under the United Nations Inter-governmental Panel on Forests (IPF), the Inter-governmental Forum on Forests (IFF), and the current United Nations Forum on Forests (UNFF), has made some key recommendations on actions to be taken by all countries to ensure SFM. One of the key recommendations is a start with country-owned policy and institutional reforms for the forest sector. Central to this recommendation is review of PFA roles. This study on "forest administration and related institutional arrangements", was conducted in the context of the above recommendations and formed part of a wider study jointly conducted by the Royal Swedish Academy of Agriculture and Forestry (KSLA), the Food and Agriculture Organization of the United Nations (FAO) and the African 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;
- Analyse and establish what the 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 the attention of the various international processes.

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 crystallize critical issues that must be addressed for enhanced performance. In so doing, the study focused on the following specific objectives:

- assess the overall state of forest administration providing information on the different mandates of the forest administration and how the responsibilities have changed in response to the overall social, political and economic changes;
- assess the capacity of the public administration in terms of technical, material and financial resources available and the changes during the last 10 years as regards the overall capacity;
- analyze the policy, institutional and political support to the public forest administration to enable implementation of sustainable forest management and to what extent the necessary and sufficient conditions for an effective public administration of forests are in place;
- assess the ongoing efforts to decentralize forest administration in some African countries and based on case studies indicate their short-term and long-term impacts;
- examine the ongoing efforts on privatization and enhancing the participation of communities in resource management and their implications on shifts in responsibilities for the public forestry administration including its ability to fulfill new functions for supporting the new arrangements;
- 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.

#### Main lessons learnt

#### **Relevance of PFA**

Among the key recommendations of the UNCED/ IPF/IFF/UNFF dialogue on forests is the need for countries to review the roles of public forest administrations and related institutions (PFA) in relation to those of other players towards sustainable forest management (SFM). It has become the general trend to introduce changes in the roles of PFA from that of the previously highly centralized executing/ implementing agency to a largely regulatory and standard setting agency, while new players take more responsibility for implementation of forestry programmes (see Annex). Thus, contrary to the previous situation where the PFA was the dominant player in the forest sector, it is now conventional that countries promote and support the roles of other playerslikenon-governmentalorganizations(NGOs), tree farmers, private sector, local communities, etc. in ensuring SFM.

In the study, most of SSA countries reviewed showed increased recognition of pivotal roles of their forest resources in ecological stability and socioeconomic development. Most of the countries have sustained well functioning PFAs right from colonial periods. Moreover, during the last decade, there have been promising highest level political commitments on SFM and on strengthening PFAs in many of the 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 (Owino and Ndinga, 2004).

#### **PFA** capacities and effectiveness

Several authors had reported that PFA in Sub-Saharan African countries are weak in capacities to fulfill their functions (King, 1969; Hill, 1992; AFWC, 1995; FOSA, 2002; etc.). This study has also concluded that weak capacities of PFA continues to be the central problem in most countries. 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 economic structural adjustment programmes. Moreover, the new paradigm for SFM calls for additional capacities and facilities, which are non-existent in current PFAs. In particular, most PFAs are very weak in policy analysis, resource inventory, 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, Zimbabwe, etc., have been proactive in policy analysis and changes (King, 1969; Adeyoju, 1995; Dykstra et al., 1997).

Drastic staff reductions, resulting from economic structural adjustment programmes, have dealt debilitating effects on PFA capacities in most countries during the last two decades. Moreover, the new paradigm for SFM has ushered in new functions for PFA, the capacity for which does not exist. In many countries, 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.

### Institutional profile

Compared to other government agencies, PFAs have remained lowly placed in government priorities (FAO/SIDA, 1983; Owino and Ndinga, 2004). This has remained the case even in forest rich countries like Central African Republic, Cote d'Ivoire, Gabon, etc. where governments benefit from substantial forest incomes (FAO, 2001). In a few countries, like Ethiopia, the once robust government Forest Department has been reduced to a much smaller unit and has have been destabilized through transfers from one government ministry to another. The weak PFAs remain gullible to interferences from higher levels of governments, particularly from presidential decrees for actions which may not be compatible with SFM. This situation holds even in countries of sub-regions, like Central Africa and the Congo Basin where forestry has recently attracted highest level political attention

### **Restructuring PFAs**

In most countries PFAs have functioned in a highly centralized, top-heavy command fashion with most management decisions (even at the forest level) requiring headquarters approval. Staff at regional, district and forest station administration levels have had relatively little delegated authority. However, many countries have recognized that this PFA administrative structure is inappropriate and ineffective in the present circumstances.

Thus, recently a few countries have addressed some of the weaknesses above and have introduced measures, which have significantly changed PFA administrative structure ((FAO, 1996; FOSA, 2002; Owino and Ndinga, 2004). Firstly, PFAs have had to adjust to the overarching changes in the country's governance structure. Examples are to be found in Eritrea, Ethiopia, Uganda, Tanzania, Ghana, etc., where governments have embraced devolution in governance. Thus, in Eritrea, 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 (Zobas). In Ethiopia, what was once a strong Forest Department was reduced to a "Team" with oversight responsibility for regional programmes in a highly decentralized manner.

Secondly, a few countries have taken steps to convert their PFAs into more business-like outfits. In Zimbabwe, PFA (Forestry Commission) has operated in this fashion since 1950s. Cote 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 early 1990s. Ghana established Forestry Commission in 1999. Uganda established National Forest Authority in 2003—just to mention a few. These developments have entailed adoption of radically different administrative structures and/or splits in structure and functions of PFAs.

Thirdly, the remits of PFA in some countries have been broadened beyond forestry with major changes in their administrative structures. For example, Ghana Forestry Commission has a Wildlife Division. Forestry and wildlife fall under one administrative unit in Eritrea, Rwanda, Togo, etc. Some countries in Sahelian belt run departments (Direction) 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 as in line with the overarching economic structural adjustment programme.

### Decentralization of PFA functions

Decentralization refers to the relocation of administrative functions from central location to lower levels. Decentralization differs from a related concept of devolution, which refers to the relocation of powers to lower levels. Trends in adoption of decentralization 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 decentralization of forest administration. During an Expert Consultation on Forest Policies in Africa, organized by FAO and CIFOR in Accra, Ghana, in 1995, it was noted that one of the main constraint to SFM was overcentralization 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, 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, decentralization is now regarded as the logical way out of the collapsed centralized functioning.

Another important driving force behind decentralization of forest administration is the overall government decentralized strategy for service delivery. Many SSA countries like Senegal, Tanzania, Kenya, Uganda, Ghana, etc., have pursued decentralization strategies for government service delivery. For example, in 1983, Kenya launched its "DistrictFocusStrategy forRuralDevelopment (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 attempt to fit into such overall national development strategies, forest administration functions became significantly decentralized.

### **Community** participation

Many countries are promoting collaborative forest management and community based natural resources management initiatives. For example, the Division of Forestry and Beekeeping in Tanzania has launched pilot Community Based Forest Management (CBFM) in various parts of the country. In contrast to the previous situation where Tanzania's forestry

administration operated on a centralized model with all decisions and implementation plans vested on the Director of Forestry and Beekeeping, the growing interest in CBFM has propelled the country to introduce the necessary legal provisions for decisionmaking at local levels with devolution of forest management responsibilities to rural communities. A good example is the Duru-Haitemba village forest reserve which has been highlighted in literature (Wily 1996; Kajembe et al., 2003). However, the success with CBFM in Tanzania could be a unique case since Tanzania has had a long history of decentralized governance. 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 recognized in law (Kihiyo and Kajembe, 2000; Kajembe et al., 2000).

#### 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 reforms in line with economic structural adjustment Programmes (ESAPs or SAPs) and, in the initial stages, national institutions (including PFAs) have 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, the available financial resources are well below the minimum capacities required to plan and to 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 scheme, which are directly used for improved forest management, this still falls far short of the resources that should be mobilized for SFM.

# Linkage between PFA and administrations in related sectors

A major limitation in implementing forest policy in most of the countries is that policy formulation and design for their implementation has been narrowly sectoral. Furthermore, implementation has remained highly centralized with weak logical linkages with administrations in related sectors. For example, development planners fully appreciate the roles of forests in water catchment, 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 PFA and administrations in related sectors such as water, energy, environment, rural development, etc. remain weak (FAO, 1983; 2003). There has been a characteristic tendency for PFAs to operate as "lone rangers" in national development front. Even in the many countries where PFAs function within ministries of water, lands and environment (e.g. Uganda) or ministry of agriculture and environment (e.g. Ethiopia, Benin, Mali, Senegal), ministry of water and forests (e.g. Gabon, Central African Republic), the lone ranger PFA has persisted.

There is big challenge in most countries for PFAs to develop effective working links with many related actors both on cross-sectoral axis and within the sector. Within the sector, PFAs are in early learning phases in linking up with NGOs in a progressively decentralized 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).

The many conflicts encountered in forest conservation and utilization 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; Adevoju, 1981). The traditional strategy of PFA 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 situation the strategies adopted for management of dry forests (parklands) in the Sahelian West Africa countries like Mali, Bukina Faso, Chad, etc. have generally been in consonance with traditional arrangements for natural management. Traditional tree tenure and control of use forms the basis of resource management plan (Boffa, 2000).

# Performance of PFAs in the context of the overall performance of the public sector

As compared to other public service agencies, PFAs have been kept by many governments as low profile outfits, are amenable to exploitation and easy changes.

For example, in Cameroon, PFA went through three successive major changes of high-handed political nature (presidential decrees) between 1990 and 1993. In Central African Republic, the long established L'Office National des Forets (ONF) was abruptly dissolve in 1993 through presidential decree. Furthermore, PFAs of many countries have been easy 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 destabilize their performance relative to other public service agencies.

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 administration to provincial and local levels in itself is unlikely to improve the situation, especially in the context of low priority that is likely to be given to the sector and the limited capacity of local and provincial administration.

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 the 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.

### Viability of public sector forestry

Recent survey of public expenditure in forestry in selected SSA countries provides valuable information and data on financial support to PFAs (FAO, 2001a; 2003). Table 1 shows trends in public expenditure on forestry in selected countries. At current prices,

Country	Time period	Average annual increase in total expenditure on forestry (%)		
	penou	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	
Cote 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	

 Table 1. Trends in total public expenditure on forestry in selected African countries

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

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 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 the respective periods. A few countries like Ghana, Malawi and Zimbabwe registered substantial increases.

Table 2 shows the sources of public expenditure in the sector in selected countries during 1999. There was great variation as to how the countries mobilized for public forestry expenditure. In a few countries like Central African Republic, Democratic Republic of the Congo, 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, Mail, etc., the bulk of the expenditure is sources 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 on external sources for their public expenditure on forestry.

# *Extent to which public forest administration is self-supporting*

Currently, very few countries have PFAs, which are self-supporting (Côte d'Ivoire and Central African Republic 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, some countries like Ghana, Tanzania, etc. 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, eco-tourism, biodiversity conservation, etc.

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

In many countries, inherent 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, Kenya, etc., 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.

 Table 2. Sources of public expenditure in the forest sector in selected African countries in 1999

Country	Revenue	Total public expenditure (US \$'000)			Sources of funds (%)		
		Domestic financing	External financing	Total	Forest revenue	Government (net)	External
Burkina Faso	780	2,201	2,328	4,530	17	31	51
Burundi	50	193	1,198	1,391	4	10	86
Central African Republic	5,566	1,030	n.a.	1.030	541	n.a.	n.a.
Chad	60	471	3,960	4,431	1	9	89
Cote d'Ivoire	41,561	32,971	7,566	40,538	103	-21	19
DRC <sup>1</sup>	803	1,277	0	1,277	63	37	0
Ethiopia	2,283	21,345	3,865	25,209	9	76	15
Gambia	225	242	445	686	33	2	65
Ghana	12,559	31,294	n.a.	31,294	<40	n.a.	n.a.
Guinea	902	7,362	8,551	15,913	6	41	54
Kenya	1,845	17,407	1,054	18,461	10	84	6
Lesotho	44	521	119	639	7	75	19
Liberia	3,100	7,317	0	7,317	42	58	0
Madagascar	2,734	4,385	7,255	11,641	23	14	62
Malawi	110	3,992	n.a.	3,992	<3	n.a.	n.a.
Mali	321	4,830	9,896	14,726	2	31	67
Mauritius	770	5,603	0	5,603	14	86	0
Namibia	68	2,548	2,767	5,335	1	46	52
Niger	351	773	6,612	7,385	5	6	90
Nigeria	2,572	12,580	8,241	20,821	12	48	40
Senegal	1,579	2,835	10,578	13,413	12	9	79
Uganda	763	1,282	2,386	3,668	21	14	65
Tanzania	2,763	7,567	31,773	39,340	7	12	81
Zimbabwe	908	2,132	1,254	3,386	27	36	37

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

1 DRC = Democratic Republic of the Congo.

n.a. = not available.

Many countries, particularly those in the Sudano-Sahelian belt, have to a large extent of arid and semi-arid land with annual rainfall well below 1000 mm, with extensive areas receiving less than 500-mm rainfall and a very long dry season. The resulting low land productivity coupled with the limited opportunities for diversification often leads to unsustainable uses including in the limited areas of high productivity as in the case of the high lands in Eritrea, Ethiopia and Kenya. Even in the arid and semi-arid areas, there is severe degradation, especially when livestock numbers far exceed the carrying capacity.

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

Even in countries with substantial bases of plantations and natural forests, 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. 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 the Congo and in South Africa. The countries can realize improvements in efficiency economic benefits from plantation management by engaging other partners, particularly the private sector.

# Ability to fully capture the benefits from management of forests

The wide range of products and services derived from forests is fully recognized. However, PFAs are often not positioned to fully capture the benefits from management of forests. 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 in uncontrolled manner. The still dominant perception of forests as a base for such public goods poses major limitation to PFAs in capturing benefits from their extraction. Even of greater potential is the capture of benefits from the services provided by forests. The important roles played by trees and forests in stabilizing agricultural production (erosion control, windbreaks, soil improvement, etc.), water catchment, wildlife habitats, biodiversity conservation, eco-tourism, mitigation of climate change, etc. are well recognized but often not taken into account in national and local accounting systems. They represent a significant 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 about the emerging opportunities and lack the capacity to position themselves to fully benefit from these new sources of funds.

# Overall economic viability of public sector forestry institutions

A few forest-rich countries like Central African Republic and Cote d'Ivoire do not only sustain public expenditure from forest revenue but also provide 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 premised on the important assumption that the forests are sustainably managed into the long-term future. For these countries, sustainable forest management could pay for itself if the 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 organizations 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 has recently concluded policy and legal framework for its newly established 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 immediate time frame. For example, Uganda's newly launched national forest plan (nfp) stipulates that UFA will be self-supporting in 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 economic 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.

#### Some Recommendations

Out of the findings of this study, the following recommendations are advanced towards improving the performance of PFA in SSA:

- (i) SSA countries should take appropriate steps to stabilize and strengthen their PFAs through improved governance. In particular, steps should be taken to minimize PFA transfers, political interference and corruption. In these respects, countries need to embrace emerging initiative on African forest law enforcement and governance (AFLEG).
- (ii) SSA countries should 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).
- (iii) SSA countries should take immediate steps to mobilize additional resources for PFAs through forest income retention schemes, national forest funds/trusts and through collaboration with NGOs and the private sector.
- (v) SSA countries should mobilize resources through 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.

#### 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.
- Boffa, J.M. 2000. West African agroforestry parklands: keys to conservation and sustainable management. *Unasylva*, **51**(200): 11–17.
- Dykstra, D.P.; Kowero, G.S.; Ofosu-Asiedu, A. and Kio, P. 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 Anderson, J. 1999. Rethinking the decentralization and devolution of biodiversity conservation. *Unasylva*, **199**(50): 6–11.
- FAO. 1985. Tropical Forestry Action Plan (TFAP). 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. p. 566.
- 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 Forests 2003. FAO, Rome
- FAO Regional Office for Africa. 2002. The State of Forests and Wildlife in Africa. African Forestry and Wildlife Commission. p. 80.
- 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**: 163–174.
- Kajembe, G.C.; Monela, G.C. and Mvena, Z.S.K. 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.
- Kihiyo, V.B.M.S. and Kajembe, G.C. 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).
- MacDevette, M.G. 1996. Partnerships between local governments, central governments, NGOs and private sector for local environment management. MELISSA programme, World Bank Country Office, Hafield, Pretoria, South Africa.
- 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.; Dabire, B. and Ferroukhi, F. 1999. Local practices and the decentralization and devolution of

natural resource management in French-speaking West Africa. *Unasylva* 199, **50:** 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, 229–236 pp.
- Owino F. and A. Ndinga. 2004. Study on forest administration and related institutional arrangements. Lessons learnt on sustainable forest management in Africa: A joint Initiative of the Royal Swedish Academy of Agriculture and Forestry, African Forestry Research Network and FAO Forestry Department
- 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, 13–22 October 1997.
- 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. p. 19.
- Wily, L. A. 2000. Forest law in eastern and southern Africa: Moving towards a community-based forest future? Unasylva, 51: 19–26.
- Wily L. A. 2002. The political economy of community forestry in Africa—Getting the power relations right. *Forests, Trees and People Newsletter,* **46**: 4–12.

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

	Actors								
Functions	Public forest administration	Quasi-government agencies/ universities	Local government	NGO/Civil society	Private sector				
Formulation and revision of policy and legislation	Main function and responsibility	Supporting function	Minor contributor	Minor contributor	Minor contributor				
National forestry development strategies and plans	Main function and responsibility	Supporting function	Minor contributor	Minor contributor	Minor contributor				
Management of forest reserves and protected forest areas	Main function and responsibility	Supporting function	Increasing function and responsibility	Communities provide support	Minor contributor				
Management of plantations on government land	Previously main function and responsibility. Now reduced function in some countries	Supporting function	Minor contributor	May provide support	May assume significant increased responsibility				
Forestry research	Minor contributor (in most countries)	Main responsibility and function	Observer	Some international NGOs contribute	Minor contributor				
Forestry extension	Main function and responsibility	Supporting function	Supporting function	Supporting function	Minor contributor				
Management of private plantations/ woodlots	Advisory function	Supporting function	Supporting function	Supporting function	Increasing function				
Licensing of activities under the Forests Act	Sole function and responsibility	Observer	Observer	Observer	Observer				
Training for 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 and responsibility	Supporting function	Observer	Supporting function	Observer				
Development of investment and trade	Main function and responsibility	Supporting function	Observer	Supporting function	Increasing function				
Monitoring and evaluation of implementation	Main function and responsibility	Supporting function	Minor contributor	Supporting function	Minor contributor				