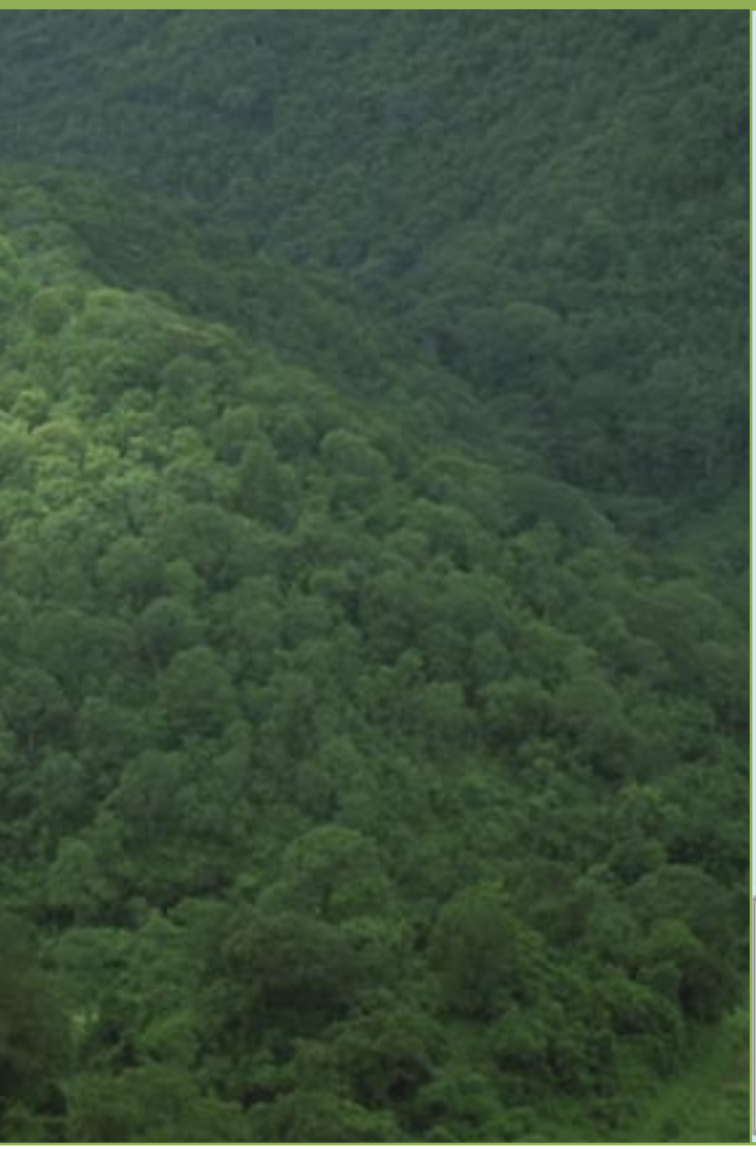
FORESTRY IN SUB-SAHARAN AFRICA - PROSPECTS AND CHALLENGES



Royal Swedish Academy of Agriculture and Forestry (KSLA)

African Forest Research Network (AFORNET) at the African Academy of Sciences (AAS)

Food and Agricultural Organisation of the United Nations (FAO)

Lessons learnt on Sustainable Forest Management in Africa *Policy brief No 11*

CONTEXT

Africa is characterised by extremely diverse ecological conditions, ranging from humid forests to deserts and from montane temperate forests to coastal mangrove swamps. The total forest, including woodlands, cover in Africa is estimated at 650 million hectares, of which 8 million hectares are plantations. An important feature is the uneven distribution of African forests between the different sub-regions and the population they support. This creates significant imbalances in the demand and supply of forest goods and services and, consequently, the potentials and challenges as regards management of forest resources. In addition, there are vast tree resources outside forests. Some of the traditional land use systems, especially the agro-forestry parklands in West Africa, the home gardens in the humid zones and the mixed farming systems in densely populated areas of East Africa provide a wide variety of wood and wood products.

Although Africa accounts for about 16.8 % of the global forest cover, its share in the global value of production from the forest sector is less than 2 %. It is also of concern that, over the years, this share has been declining. The high dependence on forests for support of rural livelihoods, exports and land for agriculture makes sustainable forest management more of a challenge in Africa than elsewhere. A combination of economic, demographic, institutional, climatic, societal and political factors shapes the forest sector in Africa in very complex ways that constrain sustainable management of the resources. Many countries in Africa have also agreed to sign international protocols, conventions and agreements on various aspects of forests and the environment, but there is little evidence on the ground this has helped realise sustainable forest management.

African countries have a long history of experimenting with different models of development, and therefore a wealth of information exists. Every initiative, if analysed dispassionately, provides valuable lessons. Unfortunately, sufficient efforts to learn from this in a systematic manner have not been made in the forestry sector. It is precisely in this context that the project *Lessons Learnt on Sustainable Forest Management in Africa* was initiated.

Within this project, two reports on overall issues were written, one on the status of forests and forestry in Sub-Sahara Africa (SSA) by Julius Tieguhong and C.T.S. Nair, and one on the factors that shape forestry on the sub-continent by Jemimah Njuki, Godwin Kowero and C.T.S Nair. Both are available on AFORNET's website: www.afornet.org

SOME KEY ISSUES TO BE ADDRESSED

Rapid loss of forests

Africa is rapidly losing its forests, and this has led to degradation of forest lands, loss of biodiversity, loss of economic opportunities and environmental instability. Between 1990 and 2000, Africa lost 53 million hectares of forests, accounting for 56 % of the world's forests cover loss, with three countries - Sudan, Zambia and the Democratic Republic of Congo (DRC) - accounting for almost 44 % of this loss.

The causes of deforestation vary between and within countries, but population growth is often cited as one of the key underlying causes. Africa is the continent with the highest population growth rate, with the average annual population increase in SSA being 3 %. Between 1980 and 2000, the population of Africa grew from 469 million to 798 million. Forest land in SSA has been converted to agricultural uses at alarming speed. Between 1981-90, such changes accounted for 25 % of the loss in forest cover while between 1990 to 2000, 60 % of the tropical forest areas cleared in Africa were converted into permanent agricultural smallholdings.

Although more than 60 % of the population in Africa lives in rural areas, the rate of urbanisation is very high, estimated at 4.3 % per annum between 1990 and 2000. The trend is expected to continue with approximately 646 million people living in urban areas by 2020 compared to 302 million in 2000. The impact of urbanisation on forests include increased demand for wood (especially woodfuel, leading to overexploitation of forests close to cities), shift from fuelwood to charcoal (because of both preference and transport costs) as forests become too distant for economic trade in firewood, and need to improve the urban environment, especially for green space. Many African cities are highly dependent on water from forested catchments for their rapidly increasing water and hydroelectricity needs. Protecting forest watersheds for urban centres will remain an important concern, particularly in view of the fact that the value of forest land for conversion to agricultural production close to the growing urban markets is very high. However, this nearness to growing urban markets also creates great potential opportunities for commercial development of the forest products industry, and thereby providing incentives for SFM.

Weak management of natural forest resources

The weak management of African forests is partly associated with a lack of clearly defined ownership of the resources and partly due to deficient technical capacities for inventory, management, use, control and monitoring of the forests. In addition, very few successful attempts have been made to attract investments and other resources for the sector. All these, together with poverty, make the forest sector very susceptible to corruption and illegal activities, including illegal occupation of forest lands, farm expansion into forest lands, harvesting of forest products, grazing, trade in forest products and transfer pricing.

Contributions of forests to national development are not well known and articulated

Most forestry activities are in the domain of the informal sector which is growing fast and escapes natio-

A very significant proportion of secondary wood use in Africa never enters the formal economy - here a man making wooden bowls for direct sale on the roadside.

nal statistics. The sector is dispersed, uncoordinated, rarely in national plans and receives low investment and other forms of assistance. The fact is, however, that the informal sector provides a substantial proportion of goods and services and is more important as a source of employment and income than the formal forestry sector. For example, employment in the forest sector is largely informal and is not fully captured in national employment statistics, while with the formal sector employment in SSA is estimated to account for only 0.2 % of the total work force.

The support forests provides to other sectors like agriculture, livestock and tourism, is hardly recognised. The vital links between forestry, food security and economic development are not well known and developed. However, with the adoption of the Poverty Reduction Strategy Papers (PRSP) as government blue prints for socio-economic development in many SSA countries, the forestry sector has the challenge to articulate these linkages if it is to get reasonable attention and resources for its development.

Insecurity of forest tenure and restricted access to forests

Insecure forest tenure and restricted access to forests are the most obvious constraints to economic development of forest areas, expansion of local business, and wider participation in forestry and conservation initiatives in Africa. An improved land tenure system - at community, village or individual levels, whatever is most appropriate in specific situations - would bring about land security and could encourage investments in forests, promote higher land productivity, and reduce the rate of secondary forest degradation. Reform of macroeconomic and land policies are necessary and timely, but will only be successful in improving management of forest resources if a participatory approach to land tenure reform is pursued.

Low rate of innovation and adoption of technologies

While science and technological advances have greatly improved the way forests are managed and utilised worldwide, most of these advances in SSA have been limited to the Southern African private sector in forestry. The rate of innovation and adoption of technologies in the forestry sectors of many African countries has been generally low in the public sector due to factors such as inadequate human capacity, funding, and other resources. There is potential for innovation and technological development in the sector, especially in non-timber/non-wood forest products and public goods and services.

Conflicts, wars and insecurity

A substantial part of rain forests in SSA reside in countries characterised by wars and conflicts, a fact that obviously creates insecurity for investment, deve-

lopment and use of these resources. This has often led to illegal logging and in some cases massive deforestation, and land and forest degradation in and around refugee settlements. At the end of 2000, there were 3.6 million refugees in Africa. In most cases, the concern of refugees is quite naturally their own survival, and not the protection of the environment or natural resources. For example, in the early 1990s an estimated 20,000 hectares of woodlands were cut each year in Malawi to provide firewood and timber for camps hosting Mozambican refugees. In DRC, refugees were removing some 800 tonnes of timber and grass each day from a park. About 113 km^2 of the park in which they lived were affected and 71 km^2 were completely deforested. In December 1996, more than 600,000 refugees from Burundi and Rwanda were camped in the Kagera region in Tanzania. They consumed more than 1,200 tonnes of firewood every day from 570 km^2 of forest land, of which 167 km^2 were severely deforested. In the Ngara District alone in the same region, refugees also put 15,000 hectares of natural land into farms.

HIV/AIDS is decimating capacity for forest management

It is estimated that today almost 30 million people are living with HIV/AIDS in Africa. In 2003 alone, the epidemic claimed the lives of 2.3 million people. Most of the affected people (around 10 million) are young, between the ages of 15-24 years. Almost 3 million are children under the age of 15 years. Apart from decreasing the capacity of nations to manage their forest and other resources, the HIV/AIDS pandemic is altering demographic features in rural areas. It is weakening economic activities by reducing productivity, and adding costs and reducing investments into productive sectors of the economy. Countries are forced to reduce budgetary allocations from productive sectors such as forestry and increase resources for healthcare. The transfer of knowledge on some forestry issues to future generations is increasingly being impaired by HIV/AIDS through loss of high calibre staff in forestry institutions, reduced child enrolment in schools, and the intergenerational gaps that result from HIV/AIDS. At the household level, HIV/AIDS diverts labour from economic activities, thereby reducing household incomes and food security. In some cases, this has also increased people's dependence on forest products for quick incomes, medicines, and nutrition.

LESSONS LEARNT

Deforestation and forest degradation

Actions in the sector to contain unwanted deforestation and eliminate forest degradation have been insufficient since they have been dealing with the symptoms and not the root causes of the underlying problems.

Trees outside forests

Africa has extensive and, as it appears, increasing tree growth outside natural forests and plantations – in communal lands, in home gardens and other agricultural lands, and in intensively managed farm woodlots (like out-grower schemes). Notwithstanding their importance, very limited information is available on the extent of these resources. In many cases trees form integral parts of the agro-ecosystem, as in the case of the agroforestry parklands in West Africa. Although there is considerable experience in managing trees outside forests, this has, until recently, received little attention by authorities and industry. Today, the potential of these wood resources to contribute to economic development and poverty alleviation are slowly beginning to be appreciated, and several programmes and initiatives are underway.

Woodfuel remains the main product

Woodfuel, including charcoal, accounted for about 91 % of Africa's wood production in 2000. The share of fuel in worldwide wood production has declined over time, but in Africa it remains unchanged and has increased in some cases. Although woodfuel is the most important forest product, reliable statistics on its production, trade and consumption are not readily available from most countries. At an aggregate level, it appears that the production and consumption of woodfuel is more or less in balance, although there are always pockets of deficit that have resulted in severe depletion of tree and other woody vegetation, especially in cases of open-access resources with ill-defined property rights.

The woodfuel scarcity problem persists, although to some extent its importance in the agenda for donor support has diminished, particularly since the surge in interest that resulted from the "energy" and "desertification" crises during the 1970s and 1980s. Also, there has been a shift from technical interventions (like woodlots and better stoves) to contain the problem, to those aimed at facilitating policy and institutional changes.

Wood for energy (fuelwood and charcoal) still accounts for by far the greatest volume of wood cut in Africa.

Forest products trade

Export of forest products is an important source of income for a number of African countries, especially in Central, Southern and West Africa. Between 1980 and 2002, the export value of African forest products increased from about US$ 1.6 billion to about US$ 2.9 billion. During the same period, global exports of forest products increased from about US$ 57 billion to about US$133 billion, i.e. a much faster growth rate than that obtained in Africa. Most of the exports originate from nine countries in West, Central, and Southern Africa, accounting for nearly 90 % of the value of African exports. The main exported products are industrial roundwood, sawnwood and wood pulp.

African imports of forest products have also registered an increase between 1980 and 2002, from about US$ 1.8 billion to US$ 2.2 billion. As is the case for exports, Africa's share in global imports remains a modest 1.6 %. Two important features of forest products imports are that paper and paper products account for a major share of the imports - in 2000 it accounted for 53 % of the African import bill. A small number of countries – in North Africa (Algeria, Egypt, Morocco and Tunisia), West Africa (Nigeria, Côte d'Ivoire and Senegal) and Southern Africa (South Africa) - accounts for most of the imports.

Africa is a net exporter of primary products, especially industrial roundwood and sawn-wood. Almost all countries, except South Africa, are dependent on imports to meet the demand for paper and paper products. Most formal trade in Africa is with countries outside the continent; there is very limited intra-regional trade. The latter is due to a number of factors, including poorly developed transport between African countries, particularly between the West and Central African forests and the North African consuming centres. It is still cheaper for most North African countries to import from Europe. Also inefficient border procedures are important market access impediments.

Trees outside forests, and particularly trees on farms, are increasingly more important in the wood markets and in local economies in many parts of SSA.

Political and institutional changes

The last two decades have witnessed profound socio-economic and political changes in Africa. The shift towards more democratic governance is very much evident. The process of democratisation has enhanced the role of several actors, especially local communities, farmers, industries and civil society organisations. In forestry, the impacts of these wider political and institutional reforms have been largely through:

- ***Decentralisation and devolution*** of administration and community participation in resource management. Many countries have amended their legislation to empower local authorities and lower government levels to manage natural resources. However, the implementation of these policies has been very slow, partly because of a lack of political will by some governments. Some countries with examples of devolved authority to local communities in natural resource ownership and/or management (mainly forests and wildlife) include Cameroon, Tanzania, Zimbabwe, Namibia, Botswana, Malawi and Uganda. The results of these decentralisation systems have been mixed.
- ***Private sector involvement*** – from large industries to smallholder farmers – in the management of forest and tree resources. There are some indications of growth of the private sector in forestry, especially in Southern Africa but less so in the other SSA regions. However, in many countries, e.g. Kenya and Ghana, private farms and homesteads are becoming important sources of wood. 'Industry – community' partnerships, especially through out-grower schemes is another potential source of wood to industries. However, most countries in Africa have still to create the required business climate to facilitate greater involvement of the private sector.
- ***Civil society organisations*** – both national and international – taking an active role in issues relating to forest and other natural resources management. The recent award of the Nobel Peace Prize to the architect of the "Green Belt Movement" in Kenya, Prof. Wangari Mathai, highlights the global recognition of NGOs, and particularly the links between peace and environment. NGOs continue to play a major role in strengthening forestry through building the capacity of local communities to manage forests, building institutions, improving the linkages between communities and forestry departments, exposing corrupt and illegal activities, and increasing public awareness by disseminating values, principles, and information.

Governance, corruption and illegal activities in the sector

The forest and forest industry sector is more susceptible to illegalities and corruption than many other sectors for various reasons, including:

- Forest activities often involve large areas and take place in remote places, far from public scrutiny, media, and official controlling agencies;
- In forest rich countries, forest resources are valuable but timber volumes and quality are not always known with precision;
- Forest departments sometimes grant broad discretionary powers to local forestry officers;
- Government officers are frequently on low pay, unsupervised and oversee high value products over large areas;
- Large numbers of regulations and permits generate additional opportunities for corruption;
- Penalties for corruption are quite small compared to the gains from corruption; and,
- Forests are placed under different ministries, some of which lack full appreciation of the relevance of the resource, hence allocation of inadequate resources for its development and management.

Corruption deters and therefore reduces long-term investment in forestry because of the risks involved in corrupt environments. There is ample evidence that forest crime and corruption are serious problems that conspire against countries' efforts to establish systems of SFM. For example, corruption represents one of the greatest dangers to the sustainable management of forests in Cameroon. It is estimated that illegal timber accounted for about 45 % of the country's "total timber production" in 2000. The value of that illegal timber was, conservatively estimated, about US$200 million. Almost three quarters of Cameroon's forests have either been logged over already or allocated as future logging concessions. By some estimates, logging at current rates will exhaust Cameroon's forests within the next 15 years. The country has now adopted two new anti-corruption measures to contain the problem.

There have been successful attempts to combat illegal forestry activities and corruption by streamlining policy and regulatory frameworks and involving other stakeholders such as the private sector, NGOs, and the public in such efforts. For example, in the 1990's Ghana faced a forestry crisis as increased demands for timber from Asia resulted in massive illegal extractions. The country employed export taxes, export bans, and mandatory inspections of forest guards, logging permits and transport permits without much success. The government then involved farmers, forest owners, industrial operators, transporters and other stakeholders. The forest owners took the first initiative to support the government, and then others followed. As a result, illegal logging was substantially reduced.

Global concerns and international arrangements

Social, ethical and environmental concerns are increasingly influencing global talks on tropical forests and have led to the adoption of a number of conventions, protocols and agreements. Likewise, agreements on economic cooperation and trade are emerging, redrawing relationships between countries. Regional and sub-regional organisations in Africa are active in forestry, facilitating regional collaboration. There are changes in the perception of economic development, with more focus on poverty and stakeholder participation. All these contribute to create changes in policies, approaches and priorities in development assistance by bilateral and multi-lateral organisations.

Armed conflicts in many of the most important forest countries in Africa have seriously and very negatively impacted the forest sector in recent decades.

Also at the national level, forest policies, legislation and priorities have undergone major changes in the last two decades as a response to these changes. Increasingly, forestry is responding to new concerns including poverty alleviation, participatory approaches to forest development and management, conservation of biological diversity and climate change issues. At the same time, many of the old problems (like fuelwood deficits and unwanted deforestation and forest degradation) still remain. Society and foresters now have to address a much more complex set of problems than a few decades ago, although the overall capacity of the institutions – administration, education, research, extension, financial resources, etc. – remains far from adequate.

THE WAY FORWARD

In order to achieve a more prominent and sustainable role of forest and tree resources in the economic development of SSA and its people, a number of issues coming out of the above analyses must be resolutely addressed when plotting the way forward:

Stop the rapid loss of forests: Make forestry an integral part of the functions of other sectors by adopting a multi-sectoral approach to forest management that can deal with both economic and environmental uses of forests within a broader land management and livelihood perspective.

Address the HIV/AIDS pandemic: Evaluate the effect of the impacts of HIV/AIDS in forestry and

re-align approaches to forest management to suit the emerging demographic situation created by HIV/AIDS, especially at local community level.

Formalise the informal sector: Create an enabling environment for the informal sector to grow and acquire visibility and resources by initially providing it with a forum for it to dialogue with other stakeholders.

Develop more appropriate tenure conditions: Carefully manage the evolution of tenurial arrangements to make them appropriate to specific locations and situations. Also develop innovative alternative land tenure systems, such as lease arrangements, that lead to long-term commitment to SFM by resource managers.

Increase the involvement of the private sector and civil society in forestry: Create an enabling environment for private sector and civil society involvement in forestry. This could include increased transparency in forestry, and putting in place enabling policies and effective legal frameworks. Further, build the capacity of local communities and their institutions, and link them with other stakeholders, markets and funding opportunities.

Identify and quantify the real contributions of forests and forestry to national incomes: Develop new tools and methods to capture full contribution of forests to national income and livelihoods.

Create an appropriate balance between biophysical and social science capacity in forestry: There are sudden shifts in emphasis of science and development between these two extremes. This has the potential to undermine the stability of long term investments in the sector. We need to take a long term strategic approach to developments and investments in the forestry sector as well as becoming more articulate in adapting new and emerging trends in the sector.

Improve forest management: in order to achieve a better management of Africa's forest resources we need to:

- Adopt a broad based and integrated land use policy to forestry that considers not only wood from natural and plantation forests and trees outside forests, but considers what the landscape can offer.
- Stakeholders in forestry must acquire a better understanding of factors outside the sector that influence forests.
- Strengthen the sector's ability to address and communicate with other sectors.
- Secure increased political and financial support to the forestry sector,
- Support the development, marketing and trade in forest products and services.
- Enhance the capacity of the sector to contribute to the national economies, poverty alleviation, and improve forest governance.

Production: KSLA, Layout: Kerstin Hideborn Alm, Printed by: Halmstad tryckeri AB, Sweden, Printed year/month: 2005/09, 1500 copies. Unless otherwise specified all photo credits FAO

The project, "SFM in Africa" for short, has been jointly managed by the African Forest Research Network (AFORNET) at the African Academy of Sciences (AAS), the Royal Swedish Academy of Agriculture and Forestry (KSLA) and the Forest Department of the United Nations Food and Agriculture Organisation (FAO).

The policy briefs are based on commissioned reports which are available in full at the web site www.afornet.org. The reports contain all relevant references to information sources used.

For more information contact the AFORNET Secretariat,
c/o African Academy of Sciences, P.O. Box 24916-00502, Nairobi, Kenya
telephone (254-2) 884401-5, fax (254-2) 884406, web site www.afornet.org, e-mail i.kone@afornet.org